Dimensions of Practice: The *Skandhas* as a Gestalt-Informed Framework for Holistic Approaches to Post-Secondary Contemporary Arts Education

by Scott Bowering

M.F.A., Nova Scotia College of Art and Design University, 2003 B.F.A., University of Victoria, 2000

Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

in the

Educational Theory and Practice Program

Faculty of Education

© Scott Bowering 2023
SIMON FRASER UNIVERSITY
Summer 2023

Copyright in this work is held by the author. Please ensure that any reproduction or re-use is done in accordance with the relevant national copyright legislation.

Declaration of Committee

Name:

Degree: Doctor of Philosophy

Title: Dimensions of Practice: The Skandhas as a Gestalt-Informed Framework for Holistic Approaches to Post-Secondary Contemporary

Scott Bowering

Arts Education

Committee: Chair: Cary Campbell

Limited Term Lecturer, Faculty of Education

Heesoon Bai Supervisor

Professor, Education

Michael Ling

Committee Member

Senior Lecturer, Education

Shawn Bullock

Examiner

Adjunct Professor, Education

Maria Spychiger

External Examiner

Professor, Teaching Degrees, Academic Studies and

Composition

University of Music and Performing Arts, Frankfurt

am Main

Abstract

This study proposes a holistic view of post-secondary contemporary arts education within a framework informed by both Gestalt theory and the Buddhist conception of the *skandhas*. Such a framework enables one to track a fluctuating series of physical, cognitive, and perceptual points of departure by which one might understand the variable and dialogical nature of inquiry and human experience in general. I rely on Mahayana Buddhist traditions that conceive the skandhas as five interdependent states. These states operate without a fixed hierarchical organization and modulate organically in response to evolving circumstances. The categories of the skandhas are defined as form, feeling, perception, mental formations, and consciousness. These categories are relevant to the multimodal and transdisciplinary aspects of contemporary arts practices in that they bridge aspects of psychology, sensory perception, analytical thought, and materiality.

I transpose the aforementioned understanding to issues specific to contemporary arts education in five "interior" chapters (Chapters 2-6) framed by introductory and summary discussions (Chapters 1 and 7). Chapters 2-6 provisionally identify constituent elements of practice according to an expanded sense of what comprises art, including "studio" arts. My aim with this conceptual transposition of the skandhas to arts-related practice is to convey a decentralized "field"-like orientation to possibilities immanent in contemporary arts education, maximizing diverse potentials of inquiry according to the mutually responsive aims, capacities, and sensibilities of instructors and students. This orientation is supported by reference to a diversity of relevant perspectives drawn from within and outside the domains of contemporary arts and educational theory, focusing primarily on elements of contemplative inquiry, philosophy of science, gestalt-related philosophy, and socio-material theory. Vignettes drawn from my teaching experience in contemporary arts and educational philosophy will illustrate the substance and relevance of these perspectives in practice.

Keywords:

Contemporary Studio Arts Education; Creative Process; Educational Philosophy; Contemplative Inquiry; Gestalt Theory; Non-discriminatory Care Ethics; Transdisciplinary Practice; Skandhas; Sociomateriality; Philosophy of Science; Buddhist Psychology and Practice; Selforganization

In memory of my father, Roger James Bowering (1938-2016), who inspired persistence and a life of curiosity, and to my partner Tondela and our daughter Nahla, to whom I owe everything for their love, support, and patience in walking this path together.

Acknowledgements

I gratefully acknowledge the many teachers, colleagues, and students who have influenced and guided me in the evolution of interests expressed in this dissertation. These teachers, peers, and colleagues have been academic and non-academic; sometimes, the teachers have been places, experiences, activities, or observations of the world around me. I am grateful for having been in the right place at the right time to encounter them all.

I am especially grateful for the guidance and support of my supervisors, Dr. Heesoon Bai and Dr. Michael Ling, who have encouraged me to develop my ideas in an organic yet fulsome manner. I am also indebted to my many friends who have shared their views and advice. I especially want to thank Carolina Bergonzoni, Steven Zhao, and Monica Bhattacharjee, whose conversation has inspired and challenged me.

I gratefully acknowledge the financial support of Simon Fraser University through its President's Scholarship and Graduate Fellowship, as well as the many opportunities this institution has offered that have enabled me to support myself and my family through the doctoral process.

I acknowledge that these karmic affinities have played out on the unceded territories of Indigenous communities where I live and have worked during my degree: the Traditional Coast Salish Lands, including the Tsleil-Waututh (səlilwəta?), Kwikwetlem (kwikwəλəm), Squamish (Skwxwú7mesh Úxwumixw) and Musqueam (xwməθkwəyəm) Nations; The Semiahmoo, Katzie, Kwantlen, Qayqayt and Tsawwassen First Nations.

I endeavour to recognize that no matter where I go, there is always *something* and *someone* already there.

Table of Contents

Decla	ration of	f Committee	ii			
Abstr	stractstract					
Dedic	Dedication					
Ackn	owledge	ments	V			
Table	of Cont	ents	vi			
List o	f Figures	5	ix			
List o	t of Acronyms					
Gloss	ossary					
Open	ing Quo	tes	xiv			
Chap	ter 1.	Introduction	1			
1.1.	Origins	and Inspiration	1			
1.2.	. Theory and Practice					
1.3.	Scope	of Interests	2			
1.4.	Key Te	rms	3			
	1.4.1.	Dimension	4			
	1.4.2.	Practice	5			
	1.4.3.	The Skandhas	6			
	1.4.4.	Holism	7			
	1.4.5.	Gestalt	8			
	1.4.6.	Contemporary Arts	9			
	1.4.7.	Studio Arts	9			
1.5.	Chapte	r Titles	10			
1.6.	Chapte	r Summaries	11			
Chap	ter 2.	Embodied Perception and Locus of Practice	16			
2.1.	Introdu	ction	16			
2.2.	Interbei	ng	17			
2.3.	Zazen a	and Practice-Realization	18			
2.4.	An Exp	anded Ethic of Care	19			
2.5.	Jiko: In	dividual and Universal Self	20			
2.6.	Gestalt	Ontology	22			
2.7.	Sociom	aterial Practice	24			
2.8.	Further	Implications for Studio Arts Education: Interior / Exterior Exercise	26			
	2.8.1.	Interior / Exterior Exercise	27			
Chap	ter 3.	Materials and Technology	31			
3.1.		ction				
3.2.		I / Non-Material				
3.3.		Practice and Language as Representation of Experience				
3.4.		s Already Something There				
3.5.	 Exposing Bias and the Bifurcation of Sensory Perception and Interpretation: Two Approaches to Studio Critique 					

3.6.	Depolarizing <i>Techne</i> and <i>Poiesis</i>				
3.7.	No Progress				
3.8.	Expanded Definitions of Technology				
3.9.	Trust and Agency within Learning Communities				
3.10.		Commodity and Art as Inquiry			
Chap	ter 4.	Methodology and System	53		
4.1.	Introdu	uction	53		
4.2.	Prescr	iptive and Descriptive Methodology	54		
4.3.	Preciza	ation and "Potentialities"	55		
4.4.	Precization and Dialogical, Self-directed Learning				
4.5.	System, Habit, and Attentive Consciousness				
4.6.	Un-Skilling				
4.7.	Teacher-Learner "Transposition"				
4.8.	Love-Knowledge and Power-Knowledge				
4.9.	Disser	tation Format: Organic Design Process as Methodology	68		
Chap	ter 5.	Tradition and Emulation	74		
5.1.	Introdu	uction	74		
5.2.	Anthro	pocentric Self-Reference	76		
5.3.	Being-	Time	78		
5.4.	Histori	ography	81		
5.5.	Axe-Ha	andles	84		
5.6.	Emula	tion	86		
5.7.	Agenc	y in Defining and Reshaping Tradition	88		
	5.7.1.	Two Examples	90		
Chap	ter 6.	Reflection, Debriefing, and Measurement			
6.1.		uction			
6.2.		Reflection and Debriefing			
		Reflection			
	6.2.2.	Emerson and "Intellect"	94		
	6.2.3.	Reflection and Intersubjectivity	95		
	6.2.4.	Immersion			
	6.2.5.	Building on Reflective Practice			
	6.2.6.	Debriefing			
	6.2.7.	Studio Critique as Debriefing			
6.3.		Measurement and Evaluation			
	6.3.1.	Aesthetic Measure: Limitations and Potential Value			
		The Formula			
		Reflection as Foundation of Analysis			
		"Natural Order" as Basis of Aesthetic Value Diversity of Variables and Standards of Comparison			
		What is Measurable in Studio Arts?			
	6.3.2.	Evaluation: What is Meaningful, Not Just Measurable?			
	5.5.2.				

	6.3.3.	Cooperative Evaluation in Building on Reflective Practice	111
	6.3.4.	Challenges to Cooperative Evaluation in Designs for Learning: Art	113
	6.3.5.	Taking Away the Pain: An Evaluation Intervention	116
	6.3.6.	Designs for Learning: Art (Summer 2023)	118
Chapter 7. Centers of Expansion		121	
7.1.	Introdu	ction	121
7.2.	Retros	pective Thematic Summary	122
7.3.	Each P	ractitioner a Center of Expansion	123
7.4.	Walking Creates the Path		124
7.5.	"Only n	hake what you want to put out into the world."	126
7.6.	Hidden Curriculum and Shadow Curriculum		
Refe	rences		129

List of Figures

Figure 4.1.	Defining the scope and trajectories of interests.	58
Figure 4.2.	Example of incremental clarification of interests.	59
Figure 5.1.	Artifact from Blombos Cave, South Africa, c. 70-100,000 BP	76
Figure 7.1.	Author's détournement ("rerouting") of text by Gary Snyder	125

List of Acronyms

BP Before Present

NSCADU Nova Scotia College of Art and Design University

OCADU Ontario College of Art and Design University

PDP Professional Development Program (at Simon Fraser University)

SFU Simon Fraser University

Glossary

Affordances American psychologist and philosopher James J.

Gibson's term for describing elements of environment that "demand or invite appropriate behaviors" (2015, p.

94).

Conceptual Art An approach to art predominantly characterized by

adherence to a largely self-defined methodology, either as discrete projects or a wider outlook over the course of

an artist's career.

Contemplative Inquiry Diverse practices, either secular or with religious

associations, in some way concerned with the possibility of personal or community transformation by means of meditative, reflective or embodied discourse and

activities.

Contemporary Art A diverse form of art practices defined by

multidisciplinary approaches, a conceptual focus, use of new or idiosyncratic technologies, and an emphasis on collaborative or participatory approaches. Contemporary arts practice is also characterized by a concern with the global and diverse nature of contemporary society, site specificity (works created in response to a particular site or location), and the idea of art as a temporary and

fleeting experience.

Debriefing A variety of approaches derived from theories and

practices relating to social organization and psychology, generally comprising forms of cooperative assessment

and planning.

Deep Ecology A range of philosophical perspectives and practices

characterized by a concern with diversity in all forms,

long-range sustainability, and mitigation of a

predominantly anthropocentric orientation to environment.

Dōjō "Place of practice". Although literally a place of training,

like a gymnasium, in the context of my discussion I intend it to mean the self as much as a geographical location (like a studio, classroom, or even our workplace, family home, or the world at large) or temporal circumstance.

Gestalt "A network of relationships whose various elements are

mutually defining" (Diehm, 2006, p.25). Also refers to various branches of multi-disciplinary experimental research concerned with the mechanics and psychology

of perception, relationship, and interdependence.

Gestalt Ontology Norwegian philosopher Arne Naess's term for an

expanded identification of self with both human and non-

human aspects of environment.

Heuristic In mathematician G. Polya's (1958) usage, "methods and

rules of discovery and invention" that consider "the mental operations typically useful in this process" (pp. 130-31). Can apply to both individual and collaborative

processes.

Historiography American historian T.S. Kuhn's theory that accounts of

history are influenced by contemporary perspectives, selective representations derived from either oral tradition

or from a record of artifacts (media documentation,

writing, or physical objects).

Interbeing Thích Nhât Hanh's (2012) term for the foundational

Buddhist perspective that all things exist in a state of

interdependence.

Jiko Eihei Dōgen's term for self that carries connotations of an

individual, conditioned, or even egoic self, but also, in the Buddhist lexicon, the expanded connotation of "original"

self" or "universal self."

Poiesis In German philosopher Martin Heidegger's usage, a

generative and processual emergence; something

emerging out of itself, like a flower blossoms.

Pratīya-samutpāda The Mahayana Buddhist doctrine of "Dependent arising,"

or the interdependent nature of phenomena.

Precization Norwegian philosopher Arne Naess's system for

differentiating interpretations and the incremental

clarification of intended meaning.

Reflective Practice The cultivation of awareness of one's thought and

behaviour before, after, or in the midst of activity.

Although formalized in varying ways in educational theory (often relying on forms of writing such as journaling), the term also carries general connotations of non-directive musing, rumination, and both open-ended and more focused analysis and discussion, as well as possible associations with elements of *heuristic* and *contemplative*

inquiry.

Shikantaza "Just sitting." A term Eihei Dōgen uses to describe a non-

instrumentalized approach to sitting meditation, associated with Sōtō Zen Buddhist practice.

Shusho itto "Practice-realization." Eihei Dōgen's term to describe a

focused vet non-instrumentalized orientation to various

activities.

Skandhas In Buddhist thought, a series of fluctuating,

interdependent states that define our experience of reality: *Rupa* (material quality, matter, form), *Vedana* (feeling, sensation), *Sanna* (perception), *Sankata* (mental concomitants, activities), and *Vinnana* (consciousness).

Sociomateriality Gestalt-related theory and practice concerned

predominantly with the reciprocal influence between

human and non-human agents within shared

environment.

Studio Critique ("Crits") Formal and informal meetings focused on the discussion

and assessment of artworks, usually in the presence of the artist. Can be done in both large groups and one on

one, between peers or between student(s) and

instructor(s).

Techne In German philosopher Martin Heidegger's usage, the

conscious application of instrumentalized skill toward

specific aims.

Uji "Being-time." Eihei Dōgen's notion that time cannot be

dissociated from its physical manifestation as everyday reality; for human beings, time is not an abstract quantity existing outside of embodied perception and activity.

Un-Skilling (in the arts)

Various approaches intended to consciously circumvent

habituated patterns of thinking and behaviour in creative

process.

"Research proceeds through a series of choice-points, at each of which the investigator has to choose—in the process some doors are closed but many more are opened..."

Edwina Pio, Buddhist Psychology: A Modern Perspective (p. vii)

"A person who is observing the scientist's actions is not in a better position to describe those actions than is the scientist himself. And there is certainly not just one description he can give. There is no end to the different characterizations, some mutually consistent, others inconsistent, which a researcher on doings can offer in responsible social research."

Arne Naess, The Pluralist and Possibilist Aspect of the Scientific Enterprise (p. 124).

"He who would do good to another, must do it in Minute Particulars... For Art & Science cannot exist but in minutely organized Particulars

And not in generalizing Demonstrations of the Rational Power."

William Blake. Jerusalem, Ch. 3, plate 55, lines 62-63.

Chapter 1.

Introduction

1.1. Origins and Inspiration

The inspiration for my doctoral research goes back to my years as a graduate student at Nova Scotia College of Art and Design University (NSCADU). Independently teaching an Advanced Studio Seminar for the first time, I discovered that any philosophy of arts educational aims, as well as any conception of curricular design, will inevitably be challenged and re-shaped by specific conditions and circumstances, primarily through engagement with students as individuals with varying interests and needs. Due to the unpredictable nature of our relationship with people and events, coursework can only be planned for up to a certain point. My program supervisor's main practical advice was to create guidelines for what I thought would be relevant and engaging to explore and "see what happened." If something did not work out as expected, I was encouraged to consider how I might do things differently in the future. This trial-and-error process enabled independent problem-solving and led to a more dialogical approach to educational practice since my speculations eventually extended to directly asking students how we might proceed. Some students were receptive to further shaping coursework according to their interests and aims, whereas others saw course design and evaluation as the exclusive responsibility of the instructor. Striking a balance between these polarities strongly indicated the necessity of addressing dialogical and democratic processes with any approach to course design I might undertake.

Although my questions regarding the role of self-defined inquiry within instructor-defined curricula remained unresolved, I discovered that it was possible to approach education more flexibly. Coursework could be openly discussed and worked out between students and myself as, if not exactly peers, at least as co-agents in inquiry. What transpired in this Seminar profoundly influenced my approach to teaching, encouraging me to make space for curriculum to evolve out of local conditions as much as be defined by the collective aspirations, interests, and resources of the learning community. I am grateful to have studied and taught at an institution whose heritage is associated with such freedom of inquiry and trust in the capacity for learners and

educators to engage in meaningful self-organization. It inspired the belief that each course could be a new adventure defined equally by experimental process, dialogue, and tolerance of both speculation and uncertainty of the result.

1.2. Theory and Practice

A more experimental approach to educational design inspired curiosity in how theory related to my immediate activities as an educator and studio practitioner. Regardless of their volitional source, studio activities are concrete and subject to processual, material, and environmental limitations. Conceptual representations of the character and purpose of these activities may be crafted coherently. Still, their coherence is inevitably challenged not only by physical, social, or organizational constraints but also by unexpected situations, spontaneous insights, or sudden changes in determinations of purpose arising in practice. I found John Dewey's (1929/1960) meditations on the relationship between "intellectual carpentry" (p. 59) and the unpredictable nature of practice especially relevant for both creative and educational processes, notably because they echoed tenets of minimalist and post-minimalist art of the sixties and seventies that had influenced my studio practice (Judd, 2019; Irwin & Simms, 2017). Because I increasingly saw my immediate activities as an artist and teacher as a response to and management of contingencies, it became difficult to conceive how any theoretical framework could be decisively asserted as normative or how theory could be prioritized over the specific determinants encountered in practice. Responsive design and experimental process appealed to me as the most realistic approach to individual and collaborative modes of inquiry.

1.3. Scope of Interests

Following the thread of my observations as an artist and educator has led to a specific range of divergent but related interests. Although originally unrelated to art, my interest in Zen Buddhist philosophy and practice is a central concern in my work as an artist and educator, although not as explicit content, commentary, or subject matter. The practice of *zazen* (sitting meditation), particularly Eihei Dōgen's (2013) understanding of its relationship to lived experience as it unfolds in a specific circumstance (p. 19), closely aligns with my sensibilities and understanding of arts and educational practice. The

grounded specificity of zazen has led me further into how art practice and educational philosophy intersect elements of philosophy of science, empirical semantics, gestalt theory, and reflective practices. On the surface, these may represent distinct domains of inquiry, but a focus on specific elements of each reveal threads of relation and continuity. Each of these domains deals with practical actions and limitations within context, yet also has an element of experimental process—testing out an idea and working in response to what transpires. Each invites the discovery of something new within oneself or about the circumstances in which one is situated as a recursive condition that can be entered into at any given moment, no matter how familiar the territory might be. Each domain encourages intimacy with experience as it unfolds, allowing for the transformation of self and conditions within one's immediate sphere of influence. The philosophical and theoretical work that has attracted me throughout the doctoral program has an element of reasoned process as much as an acknowledgment of the limitations of systems, theories, or methodologies to provide a definitive account of what we experience.

These observations, foundational to my studio activities and educational heritage in contemporary arts, continue to resonate as primary considerations in creating and teaching art. The learning community has a physical dimension as much as it works on one's spirit and speculation about what is possible. My dissertation starts from the proposition that art, teaching, and learning cannot be categorically defined by policy, methodology, theory, or achieving thresholds of prescribed performance criteria. Still, they are nevertheless shaped within these practical contexts. In my estimation, it is an essential condition of experimentation and deferred closure within a dialogical community—the deepening and unfolding of one's relation to self, other, process, and the world—that remains the shared ground of educators and students in all creative inquiry.

1.4. Key Terms

My dissertation is titled "Dimensions of Practice: The *Skandhas* as a Gestalt-Informed Framework for Holistic Approaches to Post-Secondary Contemporary Arts Education." In conceiving the exact wording of the title, I collected varying dictionary definitions and considered the relevant associations that certain key terms have for me. As it turned out, the wording of cursory Google definitions happened to convey the

essence of my approach to the dissertation most accurately and my recourse to the skandhas as a conceptual framework. Google definitions are attributed to Oxford Languages, although the entries can be substantially different from those found in the official Oxford English Dictionary and Oxford American English Dictionary entries. Either way, my interest is in generative and interpretative, not just "authoritative," use of language (a theme discussed in greater detail in Chapter 4).

1.4.1. Dimension

According to the "official" online Oxford dictionary, a *dimension* is, in the sense that I am using it in my dissertation title: "Any of the component aspects of a particular situation, etc., esp. one newly discovered; an attribute of, or way of viewing, an abstract entity" (Oxford University Press, n.d., para 2a; 2c). Yet it also denotes, according to a January 12, 2023, Google search of the word *dimension*, "a measurable extent of some kind" (para. 1a), or a "mode of linear extension of which there are three in space and two on a flat surface, which corresponds to one of a set of coordinates specifying the position of a point" (para. 1b). Despite my interest in the immeasurable qualities of creative production, there is in fact much that can be tracked—literally plotted as a series of connected points—within a contextual boundary. This document, for example, is an exercise in plotting the intersections of various trajectories of creative process within post-secondary educational contexts.

The caveat is that what much of what we encounter in educational, contemplative, or arts practice is dynamic, so the exact plotted coordinates may only *sometimes* describe the same thing for each practitioner or incidence of practice. The mathematical notions of operators and variables (from the Latin word *variabilis*, or "changeable") has bearing on art production, in that the relations between elements of a material or conceptual process may be constant, but the constituent elements may be unspecified. The "operations" or actions such as *folding* or *cutting* can be applied to any "variable" (kinds of materials). This process can also work the other way around, with definite material (for example, wood) being acted upon by a variable process (cut, sanded, burned). As with mathematics, there are endless ways this relation between "operation" and "variable" can be applied or explored.

Gestalt theorist Kurt Lewin (1936/2013) similarly considered the notion of *dimension* with regard to an accurate depiction of the "life space," and to this end created a series of diagrams representing the topology of varying facets of experience, for example direct sensory and imaginative interactions that bridged one's sense of "reality" and what he termed "irreality," or direct physical actuality and speculative, emotive, or imaginative facets of experience (pp. 198, 200, 204). Similar to the skandhas and my own interest in describing conditions surrounding creative processes in education, Lewin's account of *dimension* intersects interior and perceptual experience and the environmental conditions in which the person is situated. Lewin's (1936/2013) term "life space" itself describes the reciprocal influence of individual and environment, encapsulated in his heuristic equation B = f(P, E), or behaviour is a function of the person in environment (p. 12).

1.4.2. Practice

In Chapter 6, I describe how we might differentiate practice as a repeated process leading incrementally to expanded capabilities from practice as learning through attentive consciousness and commitment to ongoing immersion in an activity. There can also be a commitment to practice without an objective, practice for its own sake rather than practice with an aim of some kind, like knowledge or skill acquisition. This is practice as immersion, distinct from practice as a linear or teleological process. Contemplative inquiry and diverse forms of creative activity are the kinds of practice that do not always have a clear "because" answer. We do not necessarily engage in contemplative or creative activities because we desire a particular skill, or wealth and fame, or even because it is pleasant or rewarding (practice can be challenging, confounding, and even frustrating); we sometimes get hooked on certain activities just because or despite any number of possible aims. We may feel obligated to choose a justifiable reason but privately think, "who knows why?". Sometimes an activity resonates with us for no clearly identifiable reason, just like we might have an unaccountable attraction to a person or place. It is essential to acknowledge such uncertainty in discussions of art and studio art education, especially when students and instructors may feel increasing pressure to justify art as having a particular desirable (or marketable) outcome, from the benefit of "hand-eye coordination" to transferable skills such as "lateral thinking." But what of art as a pursuit in its own right? Does art, like

contemplative practices, need to serve an instrumentalized purpose to be a valid practice on its own terms?

1.4.3. The Skandhas

The conceptual framework of my dissertation is loosely based on the *skandhas*, a set of conditions that constitute the Buddhist conception of our experience of the world. In the Pāli canon, the skandhas are described as *Rūpa* (material quality, matter, form), *Vedāna* (feeling, sensation), *Saññā* (perception), *Sankhāras* (mental concomitants, activities), and *Viññana* (consciousness). According to Pio (1988), the descriptions of the skandhas in the Pali scriptures represent the "characteristic method of analysis" of early Buddhists, by which they "break down the whole into its constituent parts and consider each of the constituent parts in detail" (p. 7). The thematic chapter divisions are intended to echo this format by identifying five interdependent dimensions of experience commonly encountered in the creative process and instruction in studio arts, proceeding from general terms to a more granular analysis.

Although there is a range of scholarship analyzing the skandhas from the perspective of different traditions (the Pali canon representing the earliest and most complete account), my understanding of the skandhas is derived specifically from Mahayana Buddhist traditions, exemplified in the Prajñaparamita (Heart Sutra)'s seemingly paradoxical exposition of the interdependence of form and emptiness (Hanh, 2009, p. 1). The notion that has persisted for me throughout the writing process is the memory of a dharma talk given by abbot Eshin Hoju during a 2012 sesshin (intensive retreat) at the Zen Center of Vancouver. Hoju described the skandhas as constantly modulating and cycling in intensity, "sparked" by interactions between environment, consciousness, and our activities at a given time. No single mode, whether emotional, intellectual, sensory, or activity-related, is necessarily more correct or accurate as an experience, but collectively these modes comprise our negotiation of lived experience. Hoju's brief comment gently worked on my imagination for years, slowly dissolving my previous drive to seek what A.N. Whitehead (1925/1967) described as a clear sense of hierarchical ranking among various aspects of human experience (p. 96). It is not about choosing a spiritual orientation over a scientific worldview, for example, or intuition over reason, but rather deepening and expanding our inquiry into what it means to live in this world, in this form, as a human being. The "material" of such observations is never unavailable to us.

Despite my transposition of this format of analysis, I hesitate to emphasize too strong a correlation between the skandhas as discussed in Buddhist scholarship and my thematic design; elements of the skandhas and my interests in this study indeed intersect in many ways but are divergent in scope and purpose. I initially questioned whether recourse to such a comparison would risk trivializing a philosophical perspective of such longstanding import and influence. However, upon reflection, I have come to see my approach in the spirit of Dōgen's *Tenzō Kyokun* or "Instruction to the Cook" (Uchiyama, 2005), in which he describes the seamless fusion of philosophical principles actualized as everyday activities. My aims are similarly integrative, seeking to represent the two-way influence of conceptual constructs and my practical activities as an artist and educator.

1.4.4. Holism

Two Oxford Dictionary definitions of *holism* struck me as particularly relevant to my themes. The first is derived from 1911 edition of the Concise Oxford Dictionary of the English Language, and the second from the Oxford American Dictionary:

Tendency in nature to form wholes that are more than the sum of the parts by creative evolution (as HOLO- + ISM). (p. 570)

The theory that parts of a whole are in intimate interconnection, such that they cannot exist independently of the whole, or cannot be understood without reference to the whole, which is thus regarded as greater than the sum of its parts. Holism is often applied to mental states, language, and ecology. (p. 2134)

My sense of holism is that it describes qualities of integrative and relational conditions, not the antithesis of qualities such as categorization or the possibility of granular detail. Although I have deep sympathy for elements of A.N. Whitehead's process philosophy, it is tempered by his colleague Bertrand Russell's (1917/2013) critique of the very idea of a *universal* whole as a holdover of "pre-Copernican thought" (p. 76). In short, why not acknowledge the limits of our individual and collective anthropocentric perceptions: why a universe, a seamlessly coordinated whole, and not the possibility of any number of variations, including the possibility of the perception of

universal design or coordination as a projection of anthropocentric desires or psychological needs? My most significant interest in Whitehead is perhaps in how he describes the whole as no more or less than the totality of a diversity of granular evolutions. This does not have to be designed to display coherence; instead, the design or order is simply an expression of what is arising (not the other way around). The notion of art as imposed design, or art as organically giving rise to seeming or potential principles of coordination, has parallels in the structure of human perception and psychology as well as relevance to social organization and educational design. In the most straightforward sense, this "possibilist" view accords with my general orientation to arts practices, which I believe need to accommodate infinite variations and combinations of student interests and expression. The notion of holism applies to the conception of my dissertation in the sense that although any combination of elements may interrelate and influence one another, they are both variable and indivisible from a larger framework of *potential* relations. The skandhas similarly offer a design framework responsive to these considerations.

1.4.5. **Gestalt**

Although I will discuss gestalt theory in greater detail in Chapter 2, the 1911 Concise Oxford Dictionary provides a definition that accurately conveys its parallels to the above characterizations of holism and (especially) the ways in which it reflects the processual and variable nature of the Mahayana understanding of the skandhas. By extension, these characterizations would also apply to understanding of contemporary arts and the very format of dissertation:

An organized whole in which each individual part affects every other, the whole being more than the sum of its parts. (p. 503)

I agree with the first half of this statement but have qualms about the second half. I would prefer to say that any conception of the whole is not necessarily reductive to constituent elements in a linear sense, and that any analysis of perceived "part " and "whole" is itself variable and cannot necessarily yield any consistent differentiation between the two. Gestalt, in my use of the term, will refer to specific historical reference (such as Arne Naess's use of the term "gestalt ontology"), but will also carry a personal set of associations that include interdependence, variability, processual evolution, and reference to the evolving facet-like nature of our experience of the world. Taken

together, these associations function in ways that are arguably some of the closest parallels to Mahayana Buddhist thought in resolutely Western traditions. The diverse nature of gestalt-related theory also recommends itself for my discussion, in that it bridges research in psychology, the arts, and social organization. It is also significant for me that explorations of "gestalt" have never been exclusively theoretical but have always included an element of empirical research balancing subjective perception with shared experience of environment.

1.4.6. Contemporary Arts

Throughout this document I will refer to "contemporary art" or "contemporary arts practice(s)." Contemporary arts practice is a general term encompassing a wide range of styles and media. In contrast to traditional arts practice, the main aspects of contemporary arts practices include a multidisciplinary approach, a conceptual focus, use of new or idiosyncratic technologies, and an emphasis on collaborative or participatory approaches. Contemporary arts practice is also characterized by a concern with the global and diverse nature of contemporary society, site specificity (works created in response to a particular site or location), and the idea of art as a temporary and fleeting experience. Unlike the preceding era of modern art, contemporary arts do not necessarily reject elements of traditional practice as an anachronism, but rather seek to enliven their relevance in present-day contexts.

It will become clear how these themes intersect the perspectives and conceptual frameworks outlined in the following chapters.

1.4.7. Studio Arts

My use of the word "studio" or the phrase "studio art(s)" throughout my dissertation requires clarification. Contemporary arts may in fact not rely on a traditional physical studio space, although this is still generally common practice. The term distinguishes art/cultural theory and art history from material practice of some kind, although the parameters of the term "material practice" are, as I will discuss, open to discussion. A studio space need not imply traditional practice but can denote something closer to the non-specific meaning of its original use—a place I which to enact diverse forms of inquiry. In common usage among artists, "studio" carries this non-specific

connotation of general artistic production. This is my own way of thinking of studio spaces, which for myself accommodate varying activities demanded by what I happen to be interested in or working on at a given time. Sometimes my own studio space is closer to a study, a place to read and write. It is also where I zone out and daydream around my work and ideas in general. Other times it is more oriented to material production or digital audio-visual work. It is also where I do zazen practice.

Although this is a personal view, studios have always been environments somewhat apart from daily life for me, as opposed to strictly utilitarian production spaces. Throughout my twenties, I lived in non-residentially zoned industrial studio spaces for extended periods of time, and they had a profound effect on my general outlook regarding how physical space can shape the nature of inquiry. Studios were not exactly workspaces or domestic spaces, but spaces defined by my interests and pursuits. Out of necessity and partly from preference, I continued (when the opportunity arose) to treat residential apartments in a way closer to how I lived in studios, with one room more as a "living space" and the main room as an open studio production space. In educational institutions, a traditional classroom has a very different feeling from a dedicated studio space. I think of studio spaces as conveying a certain uninscribed psychology of possibility and freedom, but perhaps this is just a matter of degrees when compared to a dedicated classroom, which tend to have specific features that imply limitations of use (such as digital projectors, whiteboards or blackboards, and a certain number of tables and chairs). In studios, a learning community can create their own environment according to the diversity and aggregation of changing needs and interests. This is in fact how the Alexander Street studios are utilized in SFU's School for Contemporary Arts program.

1.5. Chapter Titles

The chapter titles are intentionally open-ended and relate to an exercise in comparative interpretation that I like to lead students in at the outset of coursework. Although in the form of a "warm-up" exercise, there are more profound implications regarding self-directed research within a dialogical community. For example, rather than stating a particular interpretation and definition of "reflective practice" at the outset of *Building on Reflective Practices*, I invited students to actively identify and share the assumptions, speculations, and associations with a small group of peers that the term

evokes. This exercise aimed not to produce a "correct" definition but to make space for what the term could *plausibly* denote according to a diversity of understandings. Further discussion might reveal the underlying values (of which the student may only be partly aware) that shape both casual perspectives and more vital convictions. If we compare the specifics of our interpretations, we discover that "reflective practice" may not describe any single shared outlook in the sense that normative definitions can never limit the potential of various descriptive definitions.

Naess (1966, 2005) describes how such a process can be used as "forensic" analysis—a way of revealing the underlying orientations implied by our interpretations—and as a means of practically directing the future course of our interests. For example, if we interpret reflective practice as primarily a form of *contemplative activity*, as opposed to a branch of *educational theory* associated with a particular researcher or set of motivating questions, this potentially differentiates two distinct lines of inquiry. This process of increasing levels of specification is particularly adaptable to self-directed research and can be productively applied in conceptual and practical contexts.

Coursework, in this manner, can become a generative exercise as much as a review of the extent of theory and practice in a subject area, an approach that I relate to the aims of my doctoral research. I intend the content of each chapter as iterative rather than definitive. The chapter titles are based on questions that I continue to ask myself about studio art and educational practice, and that I hoped to invite students—and hope to invite the reader—to ask themselves: "(What is) Embodied Perception? (What is) Methodology and System…?" As with my students' associations and conceptualizations of these terms, my views of each thematic section will likely continue to evolve beyond the crafting of this dissertation.

1.6. Chapter Summaries

The Chapter divisions of my dissertation will follow thematic components derived from courses I had the opportunity to teach at Simon Fraser University's Burnaby Campus in Fall 2021 and Summer 2022/2023: *Building on Reflective Practices* and *Designs for Learning: Art.*

Building on Reflective Practices proved significant because it provided a forum for exploring potential interpretations and manifestations of reflective practice in educational contexts, including critically re-evaluating influential theories associated with the term. The final component of this course comprised an experiment in responsive course design and alternative evaluation models and formed the basis of the chapter Measurement, Debriefing, and Evaluation.

I recognized *Designs for Learning: Art* as an opportunity to understand better how I conceived the scope of arts-related activities in relation to the educational practices they entail. It became apparent that my syllabus for this course touched on the major themes of my research interests and provided a clear rationale for the organization of my dissertation. The chapters of my dissertation will follow the thematic progression of topics in *Designs for Learning: Art*. Although the topic headings are the same, they will serve as a framework for expanded discussion that may differ from what was explored in the coursework.

• Chapter 2: Embodied Perception and Locus of Practice

This chapter discusses various philosophical and spiritual perspectives highlighting the interconnectedness and interdependence of self, other, and the environment. Dōgen's "true self" is the self that exists before, after, and despite thought, and his understanding of "whole" or "universal" self emphasizes the dual nature of self as both individual and relational. Gestalt ontology, influenced by Western philosophy and Buddhism, views reality as a network of interrelated elements and emphasizes the expansion of one's capacity to incorporate the world of the other into one's sense of identity. Sociomaterial practice literature highlights the reciprocal influence of self, other, and activity within the environment, and the concept of affordances bridges the distinction between material and non-material aspects of the environment. The passage also describes an exercise ("Inside / Outside") to explore the different perspectives of the physical and internal experience of the environment in a studio art context. It raises questions about the privileged viewpoint and the implications of this exercise for education and creative inquiry.

· Chapter 3: Materials and Technology

The predominant theme of this chapter is the relationship between technology, art and creativity. I describe how art should not be understood as a product of technical progress but as an activity rooted in embodied experiences. I also highlight the role of institutions in shaping the definition of art and how artists might take the lead in defining the context of their work, a situation emphasizing the necessity of educators (and the institutions in which they work) to respond to the diverse individual needs of practitioners. I also differentiate between art as inquiry and art as commodity, where art as inquiry is driven by motivating questions and self-defined modes of investigation. Market expectations and consumer demand drive art as a commodity. Art as inquiry is more significant and valuable because it has more potential to re-orient our experience of the world in a greater diversity of practices than the narrow and predictable determinations of a market economy.

Chapter 4: Methodology and System

This chapter discusses Arne Naess's concept of *precization* and its relevance to the creative process and studio art. I propose that to study and understand the artmaking process effectively, practitioners best focus on observing and understanding the specific elements of their practice as it unfolds. The discovery process is unique to each individual, and the constituent elements, aims, and projected outcomes of such a process constantly evolve. I also discuss un-skilling's role in avoiding predictable patterns of perception, process, and result. Un-skilling relates to the influence of minimalist theories of praxis on contemporary studio arts, such as Ad Reinhardt's "Artas-Art Dogmas" or Sol LeWitt's "Sentences on Conceptual Art." I will describe an exercise with a senior painting class where students were asked to read Reinhardt's "Twelve Technical Rules" and attempt to make a painting that fulfilled its contradictory directives. The exercise helped students to gain a heightened awareness of the diverse materials, processes, and mental orientations involved in painting and how they internalize its cultural "baggage" in their own ways.

I will also reflect on the format of the dissertation, stating that the non-linear nature of the artmaking process and the use of language to describe it suggests a more "pragmatist" approach that involves multiple ways of collecting and analyzing data rather than subscribing to only one way.

Chapter 5: Emulation and Tradition

This chapter focuses on tradition in the context of art education and how it can be understood, taught, and reshaped. I will discuss T.S. Kuhn's concept of historiography and how the history of any domain of study (science, art, and literature) is the history of change, not progress. I will also use Gary Snyder's poem "Axe Handles" to highlight the importance of self-reflection in reproducing knowledge, behaviour, and tradition and the power of both student and instructor to preserve, modulate or interrupt elements within this intergenerational transmission. The passage also references Lu Ji's c. 300 CE Wen Fu, or "The Poetic Exposition on Literature," and how it illuminates the divide between the intuitive execution of an action and a description of that execution.

I will also discuss Jacques Rancière's observation that all artists were once spectators or enthusiasts, inspired by the work of others to take up their own creative expression. This idea of spectatorship being folded into the creative process highlights the importance of reflection and self-evaluation in the artistic process. The artist must not only create but also reflect on their work, considering how and why things turned out a certain way and speculating on how elements of the creative process could be altered to achieve a particular aim. This reflective process leads to a deeper understanding of the mechanics of an artwork, whether it is a technical understanding of tools and materials or an understanding of the perceptual and embodied experience of the artwork. With experience and maturity, this theoretical analysis becomes similar whether the artwork in question is the artist's own or someone else's, contemporary or from thousands of years ago.

In conclusion, I will describe an assignment intended to help students understand the dynamic nature of tradition and their agency in shaping it. The project is meant to be open-ended, allowing students to explore different possibilities and to come up with new answers to the question of what drawing is and what it can potentially become. It encourages self-reflection and actively encourages students to question and reshape the tradition of drawing.

• Chapter 6: Measurement, Debriefing, and Evaluation

The theme of Chapter 6 is the use of critical reflection and debriefing techniques in educational practices, specifically in the field of studio art. I discuss how various debriefing models, including Kurt Lewin's T-Group research and the work of Mary Parker Follett, can be adapted in the classroom to facilitate open and non-judgmental

discussion and exploration of different perspectives and experiences. I also touch on the concept of measurement in art through reference to G.E. Birkhoff's "Formula for Aesthetic Measure" and the difficulty of assessing and evaluating artistic production in a meaningful way rather than just through quantifiable measures. I contend that dialogue and collaboration between students and instructors are crucial in understanding the work's aims and intentions and creating effective evaluation methods.

Chapter 7: Centers of Expansion

In this chapter, I will identify key themes across the five main chapters: the interdependence of self, other, and the environment, the relationship between technology, art, and creativity, the role of institutions in shaping the definition of art, the concept of tradition in art education, the non-linear nature of the art-making process, and the importance of aligning educational and artistic expression with one's deepest aspirations, interests, and values. I will emphasize the ethical dimension of practice and suggest that reflection on these relationships is a necessary factor of creative process. I will conclude that each artwork, each semester's coursework, and each response to coursework is an opportunity to reimagine self, practice, and what art and education can be.

Chapter 2.

Embodied Perception and Locus of Practice

2.1. Introduction

In the following chapter, I will outline a range of views supporting the notion of the inseparability of self from environment, an ontological orientation foundational to my understanding of creative process in studio art education.¹ I will refer to elements of the following discussion throughout my dissertation.

The locus of art practice may be thought of as twofold, both within the practitioner and immanent in the practice environment. However, in accordance with Buddhist perspectives, a "fundamental reality" is not to be found exclusively in either the subjective experience of the practitioner or the environment in which they are situated, but somewhere in the reciprocal influence of seeming "interior" and "exterior" phenomena. I will approach this view as an intersection of several disciplines and philosophical outlooks: evolutionary biology, Buddhist philosophy, gestalt theory, and philosophy of science. Arts educational activities may be informed by certain conceptual frameworks but are also concrete activities involving tangibly social and material constraints, necessitating a form of analysis that accounts for the relationship between conceptions of self, other, and environment within the context of experience as it unfolds. As Judd (2019) emphasizes, art involves physical and social actualities—a process and product—that, although the artist may conceptualize them, nevertheless resist or deflect the conceptualizations of either artist or viewer.

The following discussion will draw comparisons between elements of Zen Buddhist philosophy and practice—in particular, the work of 12th century Sōtō priest Eihei Dōgen—and two related branches of gestalt theory, one leading to "gestalt ontology" as found in Deep Ecology literature, and the other leading to parallels in recent scholarship in sociomaterial practices. Although the language associated with the

¹ The content of this chapter is an expanded adaptation of passages from my (2022) article "Zazen and Self as Environment" *Religions*, *13*(2), 141.

16

historical record of Buddhist practice and philosophy may seem esoteric due to cultural and temporal distances, my intent is partly to explore how the substance of these perspectives is understandable in secular terms that transcend any religious or spiritual tradition.

2.2. Interbeing

As an initial departure point, Thích Nhât Hanh's (2012) term "interbeing" describes the foundational Buddhist perspective that all things exist in a state of interdependence. As he puts it, we do not exist independently but "inter-are" (pp. 61-62). This notion is explicitly drawn from the Heart Sutra's exposition of "emptiness," meaning "empty of independent existence" (Hanh 2009, pp. 13-15). Hanh conveys the essence of interbeing through an analysis of material form, following, for example, the chain of related causes and conditions that have resulted in the creation of the sheet of paper upon which the text is written (Hanh, 2009, pp. 3-4). The interaction of various conditions may have resulted in a particular form, but the same elements might just as easily lead to different results. We can see the tentative nature of what we take as definitive or distinct in the context of different timescales—the changing of seasons, lifecycles of different living beings, or perspectives drawn from astrophysics or our understanding of earth's geology and ecosphere. Many elements of the artmaking process exemplify the contingent nature of form that Hanh describes. The artmaking process may be described as one of constant modulation and transformation, whether of material form, perception, conceptualization, or interpretation. If we consider participation in creative activities as a means of self-discovery and development, such transformation may occur simultaneously in practice and practitioner. We can extend such an understanding of interbeing to include educational contexts, emphasizing the quality and nature of relationship over more sharply delineated categorical distinctions such as learner/educator or more artificial divisions between disciplines or faculties. The ramifications of this perspective can be productively explored in literal physical/material relationships as much as in the realm of conceptual analysis or individual and social psychology.

2.3. Zazen and Practice-Realization

Twelfth century Sōtō priest Eihei Dōgen explicitly connects the notion of interbeing with daily activities, whether sitting meditation (*zazen*) or everyday work-related activities (Uchiyama, 2012). Interbeing not only means that we comprise elements beyond ourselves but that everything we *are* and everything we *do* comprises elements beyond our self, the influence of which we may be more or less aware or to whose effects we may be more or less attentive. Two orientations derived from this view have particular significance for studio processes and education.

The first relates to Dōgen's distinctly non-instrumental approach to zazen or sitting meditation, which he termed *shikantaza* ("just sitting"). Dōgen's instructions for sitting meditation are notable for balancing directives for mental attitude and physical posture with directives for the general organization of conditions within the practice environment (Tanahashi & Levitt, 2013, pp. 10–12). Particularly relevant to contemporary arts, Dōgen emphasizes a unified context of practice in which somatic, psychological, environmental, and material concerns are part of an indivisible whole. His statement "mind and environment are one" shifts what is implied by the word *dōjō* or "place of practice"—the self, just as much as a geographical location or temporal circumstance, might be recognized as something like a defining framework of transformation as much as an egoic subject who experiences transformation (Uchiyama, 2005, p. 110).

Dōgen's deliberate choice of words emphasizes that practice and realization are simultaneous in their reciprocal cause and effect (*shusho itto* or "practice-realization") and that the goal of practice—realization—is immediately manifested by assuming the posture and mental orientation of zazen (Tanahashi & Levitt, 2013, p. 12). Such an attitude is intended to de-rail a more familiar instrumentalization of method—stereotyped effort toward a conceptualized goal rather than wholehearted existence in the (perhaps) unmappable reality of present conditions as they are. Importantly, Dōgen did not posit such realization as a permanent state but rather as a certain quality of a relaxed but attentive consciousness of the fundamental relations of phenomena as they are experienced. According to this view, all activities and mental attitudes may be seen as the immediate manifestation of influence in the world. Such interdependence of phenomena may be recognized simply as evolving somatic, cognitive, and

environmental conditions, or "self" and "world," as an ongoing coalescence and dissolution of elements (Uchiyama, 2004, p. 97). The practice and realization of zazen may best be understood as a first-hand investigation into the nature of such relations as they are perceived in our direct experience.

2.4. An Expanded Ethic of Care

A second orientation particularly relevant to creative process is the notion of sensitization to one's direct experience of the world, including all aspects of what may seem like mundane activities. In the *Tenzo Kyōkun* ("Instructions to the Cook"), Dōgen describes various aspects of temple organization and food preparation in ways that are simultaneously practical and about a broader kind of attentional focus or sensitization (in Uchiyama, 2005, p.5). The point is not just to cultivate efficiency but to cultivate a non-discriminatory ethic of care toward everything that one encounters in daily life. Dōgen extends such non-discrimination to all elements of ordinary experience, which is inevitably comprised not only of our thoughts, sensory perceptions, and feelings about things but of relations between actual living beings, inanimate objects, physical activities, and materials. Dōgen's levelling of an implicit hierarchy of care, including a hierarchy of care distinguishing elements of the natural world from objects of human manufacture, as evident in his exhortation to treat a single leaf of a green "in such a way that it manifests the body of the Buddha," or a cooking pot and water as "one's own head" and "lifeblood" (in Uchiyama 2005, pp. 6–8).

Elsewhere, Dōgen (quoting earlier Buddhist texts) explicitly conflates "mountains and grasses" with "fences, tiles, and pebbles" (in Tanahashi & Levitt 2013, p. 126), refusing to judge their worthiness as manifestations of buddhahood based on whether they can be categorized as elements of the "natural" world or as "artificially" crafted materials or objects. Dōgen's softening of such categorizations as human/non-human and living/inanimate echoes elements of animist belief that no doubt would have been part of Shinto and Japanese folk culture in Dōgen's time. Festivals such as Hari-Kuyō ("Broken Needle Festival"), for example, are rooted in a similar sense of care and gratitude for tools and awareness of how they have benefitted people (Kretschmer 2000, pp. 379–404). This view is also consistent with certain contemporary non-Buddhist views, such as Norwegian philosopher Arne Naess's (1989) suggestion of replacing the term "biosphere" with "ecosphere" in his Deep Ecology platform, by which he hoped to

convey the complex interrelationship between entities we commonly think of as living, and environmental factors generally considered distinct from living beings, such as minerals, nutrients, rocks, air, and water (p. 29). Although Naess does not go so far as to include the plethora of materials and objects created by and used on a daily basis by humanity, his point, similar to what Dōgen implies in the *Tenzo Kyōkun*, is that it is open to question to what degree we can assert strict conceptual and categorical distinctions when describing and defining elements of our experience of the world, and that our sense of "care" might be extended to a wider range of phenomena, not just those we prioritize according to individual or community self-interest or exclusively anthropocentric designations of value.

Art and creative process, then, might be more closely associated with attentive consciousness to the full range of experience, not just to select categories defined as specific to various arts disciplines. Artists may further ask themselves what quality of engagement might be appropriately manifested within this variable array of intimate yet far-reaching relations.

2.5. Jiko: Individual and Universal Self

Dōgen's integration of contemplative and work-related activity provides a framework for his understanding of "self." According to twentieth century Sōtō priest and Dōgen scholar Kosho Uchiyama (2004), Dōgen's "true self" is the self that exists before, after and despite thought. To illustrate this more clearly, Uchiyama inverts Descartes' "cogito, ergo sum" to read "I am, therefore I think," further commenting "We are, whether we think so or not" (p. 29).

Uchiyama (2004) characterizes Dōgen's view of "whole" or "universal" self as being our everyday experience of our subjective egoic self, with likes, dislikes, and personality traits, yet as also a more expansive self of extended relations that exist whether we are aware of them, and despite whatever beliefs we may hold as individuals about the nature of reality (p. 29). As Uchiyama relates, the original Japanese term used by Dōgen is *jiko*, which means, in regular usage, individual, conditioned, or even egoic self, and, in the Buddhist lexicon, "original self" or "universal self" (p. 27). At the heart of this conception of self is the rejection that conscious thought and feeling (subjective identity) are the locus and measure of reality, and the understanding of all modes of

experience, whether somatic or cognitive, as unique manifestations of a more pervasive life force and reality. However, Dōgen is explicitly not describing such a pervasive life force as something like a "Cartesian identity writ large" (Curtin 1994, pp. 204–5), such as a conception of a deity that is the totality of diverse fragmentary phenomena. The self, according to Dōgen's perspective, is indivisible from the field of interrelated phenomena at any given moment yet cannot be definitively categorized as either a separate entity or as a subsidiary part of a greater whole.

Dōgen's understanding of self may be reformulated as a biological analogy. For example, we might imagine certain types of plants as manifestations of an array of factors that give rise to life in our biosphere (nutrients in soil, water, sun, processes such as photosynthesis, etc.), but also a diversity of specific forms of plants within an ecosystem. These more general complementary forces may be expressed not only as a certain species of plant, but in unique iterations as individual plants. The very same processes, however, might also give rise to many other forms of plants, which are connected in potentially symbiotic ways to yet other elements beyond themselves, including "inanimate" factors such as minerals and, in the other direction, to other more complex living beings. If we consider our human form in the same way, concepts such as "internal" and "external" begin to break down, in that "environmental" factors are metabolized as nutrients and thus move freely between being outside of oneself and, literally, constituting oneself. The self, in short, "must be reconstructed as impermanent and relational" (Curtin 1994, p. 203). Dōgen's "true reality," in one respect, simply places human beings within this nexus of relations.

A. N. Whitehead (1938/1968) arrives at a similar view in his process philosophy, in which he discusses our individual self, and human beings as a species, as literal expressions of environmental and biological processes in which "there is no definite boundary to determine where the body begins and external nature ends" (p. 161). From this perspective self is not "within" environment, self *is* environment.

Dōgen frames such interdependent relations in terms of everyday activities, in circumstances and forms in which we might experience them directly. The sense in which he employs the term jiko emphasizes the dual nature of self (at once individuated, in the sense of a temporary coalescence of phenomena, and relational). As Dōgen frames it, in activities such as cooking we handle rice, greens, water, and utensils as

though they are our very body and lifeblood (in Uchiyama 2005, pp. 7–8, 53). Or for the artist, everything that one encounters may be engaged as a kind of "material" or factor with which to work in both understanding and shaping the realm of self. The implication is that there is no special state of consciousness or perception (no special "spiritual," "creative," or "educational" experience) to access apart from everyday experience, yet this immediately familiar experience comprises an array of interrelationships unfolding from moment to moment. Another way to put it is that we might perceive certain "bandwidths" of this array of relations at different moments as they are manifested in the immediacy of our everyday affairs. So jiko may be inconceivably vast yet is also as matter of fact as "each and every thing that you encounter, no matter what it might be" (Uchiyama 2004, p. 30). Hanh (2008) describes this as "having many hearts," or recognizing that "when you see things like that you are no longer sure that you are only inside of your skin, and you can transcend very easily the duality of self and non-self" (p. 17).

2.6. Gestalt Ontology

Initially a branch of twentieth century experimental research in the mechanics and psychology of perception (Von Ehrenfels, 1937; Smith, 1988), "gestalt" theory has expanded from its earliest sources in structuralist thought to influence a diverse range of inquiry in psychology, philosophy, social organization, and art (Lewin, 1936/2013; Köhler, 1969/2015; Koffka, 1935/1963; Gold 1999; Arnheim, 1969). Although closely paralleling many aspects of Buddhist thought, gestalt theory developed without reference to these traditions, generally following a trajectory evolving from its own history of empirical experimentation and as a critique of both behaviourism and introspective subjectivism. The term "gestalt ontology," however, *is* in fact derived from Deep Ecology literature bearing the equal influence of Western philosophy and the Buddhist perspectives outlined in the previous sections of this chapter.

Christian Diehm (2006), in his discussion of Arne Naess's use of the term "gestalt ontology," defines a gestalt as "a network of relationships whose various elements are mutually defining" (p. 25), a characterization that can be plausibly interpreted as reflecting the Mahayana doctrine of *pratīya-samutpāda*, or "dependent arising" (Kalupahana, 1987, p. 120). Diehm (2006) argues that Naess's invocation of gestalt

theory implies something more like the interdependence of self, other, and environment within conditions as they unfold:

Seeking to go beyond the prevailing atomism of natural sciences, [Naess] offered a 'gestalt ontology' that views reality as consisting not of discrete material parts, but of a network of interrelated elements. The real, he proposed, is not comprised of numerous, externally related components, but instead of a vast relational field. (p. 22)

In Diehm's view, gestalt ontology does not suggest the projection or expansion of egoic self, the view that Curtin (1994) so strongly objected to, but rather the expanded integration of what we conceive of as other-than-self, including the other-than-human, into our direct experience as an individuated self. In Diehm's view, Naess's "Self-realization!" [sic] as a foundational norm of his Deep Ecology platform connotes the expansion of one's capacity to *meaningfully incorporate the world of the other*—not just any *one* but any *thing* we might conceive as being outside ourselves—into our sense of identity. In this way, the "other" is not a threat to personal integrity but is part of how all beings evolve through mutual influence.

David Rothenberg (in Naess 1989) further supports this view in that he describes Naess's conception of gestalt in a way that emphasizes identity itself as being relational in nature: "The world provides us with a flood of information, but that which presents itself to us as living entities is characterized by a certain natural life, which comes to us as a conviction that identity is inherent only in the relationships that make up the entity" (p. 6). Naess (1989) further amplifies this view as a corollary of attentive consciousness of immediate experience:

When one is absorbed in contemplation of a concrete, natural thing there is no experience of a subject-object relation. Nor when absorbed in vivid action, whether in movement or not. There is no epistemological ego reaching out to see and understand a tree or an opponent in a fight, or a problem of decision. A tree as experienced spontaneously is always part of a totality, a gestalt. Analysis may discover many structural ingredients. Sometimes an ego-relation, sometimes not. The gestalt is a whole, self-determining and self-reliant. If we call it "experience of the gestalt," we are misled in a subjectivist direction. (p. 66)

The artist, although normally centered as egoic agent of material activity, can perhaps be more accurately described as one amongst many "participants" in a process of self-organization.

2.7. Sociomaterial Practice

Certain branches of sociomaterial practices literature further articulate the ways in which the reciprocal influence of self, other, and activity within environment can blur strict categorical distinctions between living beings, processual change, and material conditions. This provides perhaps the clearest account of the relationship between artist as agent within shared material environment.

Kiverstein et al. (2021), through a modulation of Kurt Koffka's (1935/1963) and J. J. Gibson's (2015) work, offer an explicit theoretical framework describing how self and environment are mutually influenced. It is significant that this account is not limited to human beings in general but suggests a comprehensive range of relations mirroring those found in the preceding discussion of Dogen and gestalt ontology. To summarize the general scope of Kurt Koffka's (1935/1963) research, behaviour is shaped by sense perception of a geographical environment and is also framed by differing needs and interests. A diversity of beings, each with varying perceptual capacities, needs, and interests, can occupy a single geographical environment, yet perceive, interact with, and to a degree shape the environment according to such unique characteristics. Koffka posited that the "environmental field" for each being or class of beings is comprised of both "things and not-things," meaning both the physical environment and non-material aspects of environment which might be acted upon as though they were a "thing," such as "darkness" (Koffka 1935/1963, p. 70). Koffka, referring to Wolfgang Köhler's earlier research with primates, emphasized that environment is not just perceived, but is acted upon in response to perception. In Köhler's famous experiment, one chimpanzee uses a series of boxes as a seat, whereas another stacks the boxes to access fruit (p. 31). For human beings, such "not-things" might include ideas, perceptions, and emotions as they find expression in volitional activities. This points to the reciprocal nature of perception and environment—environment is perceived and shaped according to needs and interests yet needs and interests are at least partly determined by what is available to perception within an environment. More generally, a dog, a honeybee, and a human being will perceive, act upon, and to a degree shape aspects of a shared environment through the combined interaction of perception and usage, even though each of these factors in activity may sometimes overlap (flowers and pollen are relevant to bees in a

different way than they are relevant to human beings; a dog and a bird may perceive and "use" a lamp-post in very different ways).

J.J. Gibson (1979/2015), rejecting the more simplistic notion of subjective response to "stimuli," modified Koffka's basic account of the relationship between geographical and behavioural environment with his theory of "affordances," describing an affordance as something within an environment that might "demand or invite appropriate behaviors" (p. 94). Most importantly from the perspective of arts practice, Gibson describes how affordances can bridge strict categorizations of material and non-material, subjective or objective aspects of environment:

An important fact about the affordances of the environment is that they are in a sense objective, real, and physical, unlike values and meanings, which are often supposed to be subjective, phenomenal, and mental. But, actually, an affordance is neither an objective property nor a subjective property; or it is both if you like. An affordance cuts across the dichotomy of subjective-objective and helps us to understand its inadequacy. It is equally a fact of the environment and a fact of behavior. It is both physical and psychical, yet neither. An affordance points both ways, to the environment and to the observer. (p. 121)

Kiverstein et al. (2021) expand on this view by distinguishing between a field and landscape (or geographical and behavioural environment) of relevant affordances, or affordances perceived within a "shared meaningfully structured world" (p. 2283). There is one environment, yet everything within it is perceived differently according to the evolving and responsive capacities, needs, and interests of different beings as both individuals and as a class of beings within variable *contexts*. Within an exclusively human community, this further accounts for something like experiential "gestalts" or subcultures of practice in the sense of De Certeau's (2021) "pedestrian speech acts," for example how a shortcut can eventually become a defined path or actual road or sidewalk through repeated use (pp. 328-329). Skateboarders will assess ramps, steps, and rails in public architecture in a way different from those with different mobility requirements, giving rise to various interventions that promote or deny certain kinds of access or usage. Any given environment is the totality of such "revisable" contextual interrelations. By way of illustration, Kiverstein et al. (2021) describe how a public mailbox presents a certain "demand character" when one needs to mail a letter yet may be a matter of indifference when one doesn't; on the other hand, the mailbox's "demand character" may be perceived differently—as something to lean against—if it is next to a

bus stop. Perceptions of relevance and qualities of interaction shape each other over time according to agential action, and such action in part regulates the continued availability of certain characteristics of environment:

Insofar as affordances have an already determined, material and shared character they belong to the landscape. Insofar as affordances have a future directed, open-ended and affective character they give shape to the field of particular individuals. By being responsive to inviting affordances, individuals, each in their own way, act in ways that contribute to maintaining and determining the availability of the landscape in the future. (p. 2291)

To further illustrate their point, the authors describe how present-day streets in New York City have been shaped by a history of different modes of transportation, building practices and usage, or by the entanglement of material landscape with "normatively regulated patterns of individuals' activity" (p. 2291). This is essentially a processual view of the interrelationship of diverse beings shaping, and being shaped, by environment over time. Of particular interest vis-à-vis creative process is the "future-directed, open-ended and affective character" of the influence of "particular individuals" on environments; the "world" as conceived by individuals or any collective of individuals is not a fixed object or set of objects that are acted upon, any more than the "self" is a fixed entity independent of environmental influence of "other-than-self."

2.8. Further Implications for Studio Arts Education: Interior / Exterior Exercise

In "Visual Thinking," Rudolph Arnheim (1969), drawing equally from gestalt research and evolutionary biology, speculated that sensory perception is itself a form of cognition, rather than something like "raw data" or a resource for reasoned analysis. As he puts it: "... artistic activity is a form of reasoning, in which perceiving and thinking are indivisibly intertwined. A person who paints, writes, composes, dances, I felt compelled to say, thinks with their senses" (p. v). In this way, cognition is conflated with generative material activities, a view not far from Heidegger's (1954) neologism *ge-stell* ("enframing"), which describes how physically manifested ideas become part of our field of imaginative speculation. Arnheim suggests that these correlations extend to specific aspects of sensory perception (especially vision) and that the development of our species' capacity for abstract thought or critical analysis is directly related to the coevolution of our species and the environments in which we are situated. Arnheim

connects our capacity for abstract analysis to the experience of our pre-human ancestors observing their environs from removed (objective) vantage points to better identify threats and to strategize access to food and other resources (pp. 19-23).

I propose to draw on Arnheim's speculations to make a clearer distinction between art as lineages of cultural production and art as an experience evolving from a practitioner's critical engagement with the physical and perceptual dimensions of our experience of environment. "Environment" here comprises somatic, social, psychological, or cognitive realms. The purpose of such a distinction is that it speaks to a psychology of creative inquiry that is less inscribed by existing disciplinary or craft divisions and is closer to tenets of experimental process as a more open-ended methodology responsive to variable "content" or aims. At the very least, this distinction might afford a certain perspective—even if only in one's imagination—regarding how the "givens" of artistic production might be re-defined through what is discovered in practice itself, rather than practice being subordinated to culturally inscribed conceptions of the purpose and scope of one's activities.

2.8.1. Interior / Exterior Exercise

In the Fall 2018 semester of *Introduction to Educational Philosophy*, I sought to devise a brief tutorial exercise to manifest some of the conditions I refer to in this chapter. My reference points were exercises designed for initial classes in studio practice, focusing on commonly experienced conditions of embodied perception that could be adapted and contextualized through the lens of various disciplines. In the following example my purposes were slightly different, given that it was an educational philosophy course, yet similarly focused on the relationship between subjectivity, dialogue, and shared conditions.

During an initial "reconnaissance" of our assigned classroom a few days before the term commenced, I noted that it was situated next to an exit and opened out into a small area with trees and grass, visible through a window that covered one wall of the classroom. After sitting for a time in the classroom and the area immediately outside, I realized that it was an ideal situation for a discussion regarding the relationship between subjective experience and the experience of phenomena perceived to be outside one's subjectivity. It occurred to me that what is perceived as outside of one's interior

experience is in part other subjectivities and in part shared environmental and circumstantial conditions, so that when we use the word "objective" as the opposite of "subjective," we may be referring to a *shared* experience or circumstance. This is different from "objectivity" denoting a set of conditions that remain consistent and independent of variable subjective perceptions. I devised an exercise that I hoped addressed this range of common, but somewhat contradictory, perceptual experiences. It seemed like a good place to start a semester of tutorials that so strongly emphasized dialogical engagement over debate and argumentation.

For our first session, I invited a group of about twenty students to walk outside and, with the instruction to leave behind electronic devices and avoid talking, spend five minutes writing down what they perceived to be exclusively physical, external aspects of their environs. This was followed by five minutes transcribing what they perceived to be their exclusively *internal* experience of the same environment. Because of the limited time and available area outside the classroom, students were silently recording their observations in proximity to each other in the same environmental conditions.

Students were then invited to silently return to the classroom and repeat the process—five minutes describing exclusively physical, external aspects of the environs and five minutes describing their internal experience in the same place. Before class, I laid out the classroom in table arrangements that would automatically create small groups of four or five students (the number of tables and chairs accommodated exactly the number of students in the tutorial). When everyone was done, students were now invited to share their observations of the "purely physical or external" environment, such as cloudy, noisy, cool, or warm etc. Some students got into more granular detail, noticing certain plants and architectural features, or sounds at varying proximity and volume, or something more subtle like a gentle breeze or shifting colours of buildings and distant mountainsides as the sun emerged and disappeared behind clouds. These were ostensibly "objective" observations devoid of commentary or interpretation.

Students were then invited to share their "internal" experience of the same environments, which provided a greater diversity of responses and discussion. Values were now attributed to what were previously "neutral" descriptions of physical conditions such as air temperature (pleasant or unpleasant). Emotional responses, opinions, and tangential trains of thought spontaneously emerged, sparked by any number of

perceptual associations derived from the immediate environs ("Why did I wear this today? I can't stand all this construction noise. What is the point of this exercise? Am I doing this right?"). Memories and associations on a less immediately reactive wavelength also arose—the smell of the early autumn air, the sound of distant traffic, the sight of the library triggering further memories and associations. A different set of observations emerged when in the classroom, including contradictory descriptors (for some students it was "stuffy" as opposed to "cozy," or "quiet" as opposed to "oppressively silent").

The prompt for the next stage of the discussion was to ask the discussion groups where they believed the demarcation line was between the "internal" and "external" experience of the two environs. It became clear from this simple exercise that it was difficult to separate the two, because we are never "outside" either environment or self. Our feelings and thoughts are sparked by sensory perception, but thoughts and feelings also skew what we take to be external to us: is an environment objectively "miserable" just because it is cool, cloudy, or raining? The exercise demonstrated that the half-conscious assumptions we might have of the universal nature of our subjectivity are at least open to question.

Although we may agree on basic factual descriptions of our environs (such as undeniable physical aspects such as the existence of a tree before us or clouds in the sky), there remains latitude in how such actualities are interpreted and prioritized. To follow up this point I sketched out the following blackboard notes, where $(S_1, S_2... S_{20})$ represented the unique observations of each student (S). A comprehensive extension of potential viewpoints of two-fold Interior/Exterior experience might hold potentially infinite variations: $(S_1 S_2 S_3....S_{20})$ etc.—*in this circumstance*, because tomorrow, or even ten minutes from now, we might all notice and experience something different. The environs within us, and the environs in which we experience that self, cannot be accurately described as any single, unchangeable place beyond certain indisputable features, unless we assert a generalized conceptualization of it. If we were to do this exercise ten times in a row, what we each might notice, and the associations arising from such experience, may in fact be slightly different.

So it is with ideas and opinions, analysis of texts, or revision of our own ideas and opinions regarding direct experience. A parallel point is that it is through dialogue

with others that we remain in touch with the fluidity of such conditions and remain in touch with the degree to which what we take as objectively factual may be somewhat insubstantial—a projected interpretation (Rain + University Tutorial = "Today is miserable."). Recognizing this process in others can help us recognize it in ourselves.

Chapter 3.

Materials and Technology

3.1. Introduction

What constitutes the materials and tools of contemporary arts practice? It depends on how we define both materials and technology. Traditional tools and materials reflect specific methods and aims, but each generation, as Serra (2011) notes, discovers and defines the materials and tools appropriate for the realization of one's aims. In contemporary practices, such definitions continue to be variable and diverse, reflecting motivating questions that have preoccupied artists since at least the nineteen sixties, where we see a proliferation of practices extending on one hand into forms of industrial manufacturing and new media technologies (Nagy, 2016; Uhlin, 2010; de Courcy & Todd, 2009) and on the other into concerns with embodied experience, individual and social psychology, and sociopolitical critique (Shimmel, Noever & Stiles, 1998; Marxen, 2009; Applin, 2016). My reference to this era is in part due to its direct influence on my own studio and educational practice (and the shaping of institutions in which I studied), but also due to contemporary practices owing so much to the intensive experimentation in sensory, technological, and sociomaterial experience that occurred in this decade.

Contemporary approaches to art require an expanded understanding of materials and technology. To be clear, it is not simply a matter of keeping up with the latest developments, but instead accessing a deeper understanding of our relationship to the world and characteristics of our psychological orientations to material production. In this regard, "technology" might refer to a tool as primary as a burnt stick (charcoal) or as complex as a 3D printer. A 3D printer may be more technologically *complex* but is not necessarily more *advanced*—what matters is how appropriate the means of expression might be for what insights or experiences we seek to make available to others.

Contemporary practices have re-inscribed the nature and definition of the material and technical means of expression. For example, experiences common to us all may be defined as a "material" with which the artist might work, or, as I will relate, institutional

protocols might be redefined by way of Foucault's understanding of "technology" and worked with or against as an element of creative production.

"Material" may be defined simply as the constituent elements of a given project or form of creative inquiry, and "technology" the means of its manipulation toward certain ends. What is "skillful" in a craft sense may no longer be limited to traditionally circumscribed notions of expertise in handling tools and materials historically associated with a discipline, rather, practitioners can redefine the constituent aspects of practice itself, including what it means to manifest one's knowledge and understanding of their possibilities with practiced integrity and ingenuity. In this chapter, I will outline the justifications for such an expanded understanding of materials and technology and discuss its implications in educational contexts.

3.2. Material / Non-Material

In a (Spring 2014) second-year studio class in the School for the Contemporary Arts at SFU, I experimented with a timed exercise in which I asked students to record as many associations as possible with the words "material" and "non-material" (or however the opposite of "material" is conceived, such as "immaterial" or "spiritual"). Here is a selection of student responses:

Material:

physical, solid, apparent, real, substantial, present, unavoidable, sensation, can be touched and felt, spatial

Non-Material:

immaterial, emotional, spiritual, thought or speculation, not important, "besides the point," imagined, interpretation, "an idea not a thing," memory

The purpose of this exercise was to sensitize students not only to their own ideas of what constitutes the materiality of art processes, but also the ways in which non-material—although no less real—phenomena also define creative production. As with Gibson's (2015) "affordances," what we may think of as tangible, real, or meaningful in art transcends strict categories of physical or sensory perception, material process, cognition, and embodied activity and affect. All art is a combination of tangible material and non-material elements, of ideas, intuitions, and feelings as much as physical fact. It

is this complex array of factors that comprise the primary conditions of artmaking as a totality.

The preceding exercise formed the basis of the following assignment:

Make a work that is:

- 1) Equally material and non-material, or
- 2) Exclusively material, or
- 3) Exclusively non-material.

What are the material elements of a proposed work or body of work? What are the non-material elements? Students were invited to reflect on work that attracted or affected them deeply, and to itemize the perceived material and non-material elements as comprehensively as possible. Physical aspects, because they were more readily apparent, might be itemized with increasingly granular detail through prolonged observation, whereas the definition of non-material elements could prove more elusive. Could the student's own feelings and perceptions of an artwork supersede an artist's statement of intent? Was interpretation really a part of the artwork? The same issues arose in developing proposals for assignment. For example, some students associated something of the "spirit," like a lifeforce or divine energy, as being the opposite of something material, whereas others defined the non-material aspects of artworks with emotions, cognition, ideas, or "invisible" physical forces we perceive by inference, such as gravity. To what degree might these be clearly defined and manipulated for the purpose of an artwork? Consideration of this dilemma also raised questions about how non-material elements of an artwork interact with what is physically apparent—for example, what element of sound, considering both its physical characteristics and how different sounds affect the hearer, is material or non-material, an "objective fact" in the world or a "subjective" sensory perception? Are the optics governing colour perception material or immaterial, especially when considering individual or cultural nuances of interpretation, such as whether certain colours are warm or cool, or whether a mixed colour is more one hue than another? Given such questions, can we too easily ascribe meaning to the physical actuality of artworks? Although this seems like philosophical speculation, such issues in fact form the "nuts and bolts" of artistic production.

Responses to the Material/Non-Material assignment demonstrated a heightened sensitivity to the actual conditions of artmaking within specific contexts of experience. For example, one student focused solely on the experience of "transit time," making audio recordings of every moment spent either walking, driving, cycling, or riding buses between work, home, and school. In a dimly lit gallery space, a simple iPod and speaker set-up an initially perplexing range of sounds that became increasingly identifiable as the familiar sound of Skytrain announcements, footfalls and traffic, and the distinct combination of a car radio and windshield wipers. From this montage (and ongoing crosstalk regarding exactly what we were listening to), images and associations emerged in the semi-darkness of the gallery. Our analysis of the work was close to the mark: the student likened this "in-between" state of transit to something like sleepwalking or daydreaming, or at least a repetitive everyday experience of semi-consciousness that in fact added up to a great deal of her waking moments.

A second student, infamous for lack of preparation of media equipment during critique presentations of their work, focused on the "technical preparedness" protocols of presenting artworks in educational contexts. The resulting work was what appeared to be a common (yet complex) set-up of his laptop with audio and visual interfaces in the studio gallery space, with which he apologetically tinkered for the duration of his allotted critique time. After eliciting the exasperated assistance of several peers to help untangle the routing of cables and laptop set-up, we slowly realized we were in fact witnessing the actual work, not just the ancillary preparations toward it. The previously "invisible" elements of technically dependent media work were rendered as physically palpable yet also potentially "inert" as soon as they stop functioning for the desired purpose. Students described how the very arrangement of the laptop, video projector, and speakers induced a state of passive expectancy as well as the kind of irritation one might experience when the screen in a movie theater goes blank or when an internet signal keeps dropping. Our expectations of following a particular social or organizational protocol were rendered equally visible as a defining factor in an artwork.

General discussion during this session turned toward the realization that there exists of a range of pre-determining behaviours and expectations in the experience of artworks, whether performative or involving audiovisual media and material objects. Students' responses to this assignment, when reviewed through two full session of critiques, revealed a diversity of such conditions as a potential means of expression and

exploration; there is much in our everyday experience of the world—things that are familiar and available to all—that can be revealed and re-directed within the context of art production, and a great deal of it in fact functions as constraints of which we are largely unconscious. Important characteristics of the artmaking and viewing experience are also suggested through such an exercise: no environment is a neutral given but is rather a defining set of physical and non-physical conditions that can be leveraged in communicating meaning. Some outcomes of this assignment were that we, as a group, came to perceive more of the world around us as both the instigation and endpoint of creative process, and that creative process does not necessarily require more invention and adding to experience, but can become a means of revealing more of the world through heightened sensitivity and attention to what we experience. Interestingly, this aligns with the most basic training in traditional drawing practices: slowing down and spending more time observing the object before us rather than transcribing a preconceived symbol or stylized representation of it. Common life-drawing exercises such as blind contour drawing (rendering the "topography" of an observed object without looking at the paper) are specifically designed to recalibrate the students' attentional focus from preconceived system of image-making—from something like symbolic or semiotic representation—to observed actualities, no matter how counter-intuitive these may at first seem to be.

3.3. Material Practice and Language as Representation of Experience

As suggested by the Material/Non-Material assignment, language itself, the most immediate means of communicating the conceptual volitions informing one's activities, plays a complex role in creative practices. As Arnheim (1969) suggests, preconceived ideas alter what we see, even though our preconceptions do not alter the material actuality of what we perceive (p. 22). To refer to the previous chapter's discussion of the *Tenzo Kyōkun*, Uchiyama (2005) sought to demystify Dōgen's approach to *zazen* by describing how embodied experience can be differentiated from *ideas* about embodied experience: "The actuality of the world that I live in and experience is not merely a conglomeration of abstractions" (p. 26). According to Uchiyama, this also applies to the abstractions commonly used to describe elements of Buddhist practice itself, including speculations regarding states of enlightenment, concentration in activity, or "oneness

with all things." To counteract such habituated recourse to abstraction, Uchiyama (1973), rather than positing what one is supposed to experience, instead describes Dōgen's approach to zazen simply as a baseline of wakeful attentiveness to which we might return from the inevitable distractions, inattention, and daydreaming that arises during any activity (p. 33). This description stands in contrast to a view of zazen as a specialized activity that will enable the practitioner to reach a projected ideal state.

Artists involved in material production are sooner or later led to similar reflections on the relationship between the physical manifestation of artworks and representation of artworks (and the artmaking process) as verbal or written expression, as well as the relationship between such mundane material actuality and the notion of the "special" or transcendent nature of creative expression and the experience of art. The often random and indeterminate features of practice can be misrepresented by a well-crafted written and spoken account of practice. Csordas (1994) characterizes this as the false polarization of semiotics over phenomenology, or "representation over being-in-theworld" (p.11), "false" because, in his view, linguistic representation is never exclusively self-referential, but rather "gives access to a world of experience in so far as experience comes to, or is brought to, language" (p. 11). In this way, an artwork is not necessarily what the artist themselves might say that it is or is not (both positively and negatively), nor is its definitive interpretation and evaluation necessarily what any one viewer, or any averaging of interpretations, might assert as a supposed "objective" view, of which there is no possibility beyond indisputable observations, such as whether a material is in fact stone or plastic. An artist may perhaps only be "definitive" or accurate in describing, to the best of their ability, their interests and intentions in a given project. The significance of an artwork is ultimately subject to interpretive and evaluative contingencies beyond the artist's—or anyone else's—ability to control with any finality. Material objects or documentation that persist beyond the artist's lifetime will be subject to associative potentials peculiar to each new generation of viewers.

The above perspectives echo Dewey's (1960) speculation about the relationship between abstract conceptualization and practice. The "intellectual carpentry" (p. 59) of written and verbal communication conveys an illusory clarity and certainty—illusory because one may confuse the satisfying internal logic of an idea or theory (or an appealing flourish of rhetoric) with a correspondence to actualities. Material practice, on

the other hand, perhaps more obviously demands a response to contingencies in ways that are closer to the self-correcting trial and error of experimentation.

3.4. There is Already Something There...

When we walk into a new environment or simply stop and look around, there are always an incalculable number of things going on that exist independent of our presence or subjective perceptions. When we turn our attention elsewhere or go somewhere else, the world continues independent of these perceptions. The artist does not necessarily need to "create" meaning and associations from scratch because—at least for human beings—all materials, objects, environments, and experiences radiate associations and varying degrees of "meaning." For the artist, sensitization to such qualities and associations is the foundational "material" with which one works; because it is, to a degree, part of a shared environment or set of conditions, it can act as the point of communication between the artist and others. These associations are not exactly inherent in the object of perception, nor simply in the interpretive lens of the practitioner. Hanh's (2009) "interbeing" parallels the kind of analysis involved in this attempt to understand exactly what something is, how it comes to be, and what it might become. Objects and environments are evolving combinations of materials and processes that may have diverse, unfixed (and unfix-able) associations. Accordingly, it is incumbent on the artist to discover what is already there at least as much as construct and project a view.

Dōgen's "practice-realization" touches on this relationship between physical presence and how it sparks associative conceptualizations: zazen, like any activity, can be stereotyped according to a particular understanding of the aims and character of the activity, but activities also exist independent of any linguistic or volitional conceptualization—they are just what they are. This is particularly relevant in art because practitioners not only construct and communicate narratives intended to direct the interpretation and reception of their work but construct a professional or artistic identity through signalling orientations and values through choices in practice. An artist communicates their affinities or aspirations through the belief that certain forms of media or methods align with certain values. But the choice of media, material, or activity is, on another level, just the activity and product, which can be ascribed any number of purposes, interpretations, or qualities by means of explicit statements or reference to

antecedent work or cultural theories. The practitioner's ability to control or direct narratives around their work is limited and temporary—the artwork itself as a physical entity (or even just as documentation) can "outlive" any such contextualization. A close analogy is a simple physical activity like running. Running can be conceptualized as self-care, play, exercise, self-improvement, or competition, yet in the end it is just the physical activity, regardless of how we ourselves or anyone else might conceptualize it. Dōgen suggests something similar with his term for zazen—shikantaza ("just sitting"). In other words, not sitting according to any conceptualization of the purpose and qualities of the activity (enlightenment, self-improvement, self-discipline, mental and emotional stability), just sitting.

3.5. Exposing Bias and the Bifurcation of Sensory Perception and Interpretation: Two Approaches to Studio Critique

This issue becomes evident in critique sessions, where varying observations, opinions, and interpretations of student work are shared and debated as a group. In my own education I recall instructors who disingenuously claimed neutrality in critiques. Their inadvertent flashes of bias—often suggested by use of mildly pejorative language—provided opportunities to redirect the discussion toward what I believed to be a more productive dialogue. This experience as a student inspired me experimentation with different critique formats when I became an instructor myself. "Exposing bias" is an approach to critique I first tried out in a second-year painting class at ECU in Spring 2006, as a way of understanding the difference between our conceptual orientations or values in art and the degree to which what we perceive can be ascribed to the material nature of an art object. "Exposing one's bias" just amounted to saying what one was really thinking, instead of being politely supportive or engaging in what I thought were unproductive critique protocols such as "say one positive thing and one negative thing about the artwork." I suggested we try to straightforwardly state how and what we thought of someone's work, even if our commentary included pejorative language. In graduate school, I heard stories of critiques in previous decades where artists felt so strongly about their ideas that discussions devolved into shouting matches and physical altercations but saying what is really on our minds doesn't have to go that far to be revealing or useful. I would preface the critique session by explaining that just the act of

articulating one's views is the beginning, not the defining condition, of productive discussion. Saying out loud what we are really thinking doesn't make our opinions any more are "right," no matter how bold we are in our convictions, nor our views any more immune to critical analysis. What often happens is the exact opposite—hearing our views out loud makes us realize how convoluted or out of touch they can be, how full of contradictions and reliant on insupportable assertions. For example, one second-year painting critique involved a spirited and in-depth discussion about exactly what "girly" art was, or, of equal interest, the inherent cultural bias contained in statements such as "I hate the Easter-egg colours in your painting." In this case, the speaker found that although it was possible to partly explain to a Japanese international student what they meant by "Easter egg colours," it was difficult to explain exactly why they were objectionable. More importantly, it became apparent that this view was not quite as coherent or universally supported as the student had initially assumed.

Upon reflection, there were a few points that came out of this exercise. The first was that our perceptions and ideas are not necessarily contained in the material actuality of the artwork. The second was that what is often being discussed in critique sessions are the conceptual representations of what we believe the artwork is, which is distinct from the direct experience of the artwork or its material actuality. In direct response to this critique, I developed a second approach for the next critique session, which has become my more standard practice across disciplines. In this version, I invited students to first itemize purely physical or sensory observations of an artwork, including what they notice about the environmental context in which it is situated. This was done individually and in silence because experimentation revealed that social interaction tended to homogenize observations, whereas private reflection more often revealed greater diversity and nuance. After the allotted time, students were invited to read out their observations in quick successions, providing a comprehensive snapshot of the full range of perceptions of the artwork and its environs. In the second phase of the critique students were now free to itemize all the plausible associations and interpretations of the work's purpose or meaning. This was also done in silence and privately. Only after the group had shared their responses and compared and discussed their views would the artist themselves have an opportunity to describe their intentions and working process. I believe this approach to be a means of balancing the full experience of material process, its effect on others, and the variables of conceptual representation.

3.6. Depolarizing Techne and Poiesis

Martin Heidegger's (1954) "The Question Concerning Technology" was one of the more commonly assigned essays I encountered as a visual arts student, turning up in studio courses in photography and painting as well as on at least three occasions in cultural studies courses during my undergraduate and graduate studies. Out of increasing curiosity I read this essay a little more thoroughly each time but was left with the impression that either I was missing something or that my instructors were invested in a particular interpretation that sidelined alternative readings. Compounding the dilemma has been the increasing scholarship into the author's anti-Semitism and associations with Nazi politics (Blitz, 2014). I am interested in the possibility that my potential misunderstanding has nevertheless resulted in some useful ideas. My general take is that Heidegger is seeking to understand something of the psychology of our relationship to tools and materials, how the very nature of technology is in part our nature as human beings, which in turn reveals something of the ethical dimension of how we have continued to shape the world through the concrete manifestations of our speculative conceptions. Around the time of the original lectures that led to his essay on technology, Heidegger (2001) expressed concern with the development of the atomic bomb, compelling him to better understand the source of our relationship to technology as either a constructive or destructive force, a means of positive creativity or instrument of control. The true threat to our well-being as a species is not technology per se, but rather the "unconditional character of mere willing in the sense of purposeful selfassertion in everything" (2001, p. 114). As he put it in the anachronistic gendered language of much mid-twentieth century writing, "Man stares at what the explosion of the atom bomb could bring with it. He does not see that the atom bomb and its explosion are the mere final emission of what has long since taken place, has already happened" (p. 114).

The Greek terms that Heidegger employs can be a barrier to students (as they initially were for me) but are themselves useful "tools" for thinking about the relationship between art, materiality, and technology. For Heidegger, the essence of technology is a combination of generative manifestation ("bringing-forth") and instrumentalization—literally the design and use of tools as a means of manipulating some aspect of the world for a desired end. However, there are different modes, each of which suggests an ethical

orientation, by which elements of our imaginative speculation are actualized. My understanding of Heidegger's term techne is that it denotes the human propensity to devise the means to shape conditions, physical materials, or elements of experience to accord with a conceptualization of value and utility. The very basis of handcraft, such as an understanding of woodgrain and proper use of appropriate tools in woodcarving, is a form of instrumentalization, although of a different scale or level of complexity as, for example, designing and constructing a hydroelectric dam. In a wider sense, techne describes a mindset of instrumentalization, where the projects one imagines render everything one encounters as a potential resource toward their realization. Heidegger uses the term "standing reserve" to denote seeing the world in terms of resources for the realization of projects. Such resources can be natural, human, or in some way manufactured. The mindset of instrumentalization tends to downplay the possibility of diverse factors of interdependence and relationality and prioritize limited factors defined by the nature of a given project, so that, for example, the overall ecology of an area may be ignored in the extraction of a single natural resource, as is the case in mining operations.

Heidegger contrasts techne with a different kind of "bringing-forth," poiesis, or the recognition of inherent value and organic unfolding, regardless of any definition of utility. Poiesis acknowledges the possibility of diverse values as opposed to the identification of a single value to the exclusion of others, implying an ethical dimension in our choice to act upon a particular conception of utility. To act upon some conceptions of utility can preclude other possibilities from flourishing. Artists necessarily struggle with such questions—for example, is monetary value or at least what is conceived as advancing professional notoriety to be prioritized as the primary value of practice? The sustenance artists might discover in creative process is often contradicted by the pressures of professional validation. Craft practice, in a strictly material sense, negotiates the demarcation line between the use and outright exploitation of resources. Creative process lies somewhere between recognizing the instrumental value of material or nonmaterial resources without precluding the possibility of other kinds of value that might be attributed to them. Creative production is in part defined by not allowing the instrumentalizing mentality of techne to define all interactions and observations of the world around us. Heidegger's (1954) example is a river as experienced by the poet and the river as exclusively defined as a necessary component of a hydroelectric dam. But of course, as suggested by Kiverstein et al. (2019), the river exists independent of either of these anthropologically defined purposes. Art objects, and the process of making and teaching art, can be viewed through a similar lens. Drawing can indeed encourage handeye coordination or serve therapeutic aims, but such a limitation of purpose and utility does not fully account for the activity's potential value, which may in fact have nothing to do with justifications of "utility" of any sort. Our choice to make art does not have to be dependent on any rationalization of art's purpose or value—it is not necessarily for the purpose of creating commodity objects any more than it is a means for promoting social justice, philosophical inquiry, or any other ideological. It can certainly be utilized for these and any number of purposes, but none of them can decisively limit what art is or can potentially be.

Although Heidegger lays out a central conflict that can be read into the heart of arts-related practices through techne and poiesis, such a simplistic polarization does not reflect the complex interplay of an artist's engagement with materials and tools. Instrumentalization—a deliberate use of something as a means to a result, can even be combined with an expanded ethic of care with regard to tools and resources. Handcraft is an example of such a balancing of techne and poiesis, both from the perspective of a mature use of resources, but also through the direct understanding of the necessity of harmonizing the resources of the human body with the material resources of tools and craft. Techne is not just something produced by human beings but is the human body itself, whether in our conscious understanding of how to manipulate the world around us toward desired ends, or the training of physical and sensory capacities toward certain ends. We usually think of handcraft and embodied activities as the opposite of mechanization, yet they can just as easily become a form of mechanization through repetition in practice. Many artforms involve both training and un-skilling, or the attempt to outsmart habits of physical or mental response. Artists don't just use tools and materials, but, like anyone engaged in certain activities, become increasingly sensitized to the qualities of specific tools and materials. The animism of the Broken Needle Festival referred to in Chapter 1 is the logical extension of reaching for a preferred utensil in the kitchen, or a tool or machine whose peculiarities the user has become intimately familiar with through long-term use. The essence of craft is to some degree instrumentalization, yet this is tempered by what is discovered through relationship, which includes the ability to sometimes leave things alone and allow them to flourish

independent of our own needs, sometimes observing and learning rather than asserting and manipulating as default modes of engagement.

The ethics of craft is directly implicated in sensitivity to desirable qualities of tools and materials, as in the somewhat obvious recognition that, for example, there can be no good quality food without conditions that support good quality food production, or that sensitivity to qualities of certain kinds of wood necessitate care and support for conditions that allow certain trees to flourish (Houseley, 2014, p. 64). It is about experiencing and internalizing the direct relations between environment, material, and craft practice. Anyone who has engaged in some form of craft understands the shift that happens in one's relationship to certain tools, regardless of their degree of complexity or whether they are manual or electric. Rather than tools becoming interchangeable, we start to prefer the fit or peculiarities of a specific tool, as an instrument it becomes a comfortable extension of ourselves through habits of use. This is true in something as simple as a preference we might develop for a certain cup or knife in our kitchen when performing certain tasks but is also true of tradespeople used to working with both hand and power tools, and even musicians using specific instruments (either acoustic, electric, or electronic). What develops through relationship, in a sense walking a path together over time, cannot be any more interchangeable with tools than it is with people. Familiar tools develop a kind of "personality" whose little quirks and capabilities we understand over time. It is perhaps for this reason cars or even musical instruments can acquire nicknames as though they were a living being, such as Neil Young's "Old Black" Les Paul or B.B. King's "Lucille" Gibson ES-355 guitars. The animism of the "broken-needle festival" is a recognition of the value of such relationships (and they are relationships). It is in this way that Heidegger's definition of techne intersects the spirit of poiesis—craft practice is an area where they may not in fact be diametrically opposed.

3.7. No Progress

Due to its close association with progressive innovation throughout the twentieth century, art is vulnerable to a teleological understanding of technical progress, or endless "improvement" toward an ideal state and a concomitant obsolescence of technology from generation to generation. This is exacerbated by the avant-garde notion of the necessary rejection (or outright negation) of tradition, which is rooted in ideologies specific to the era leading up to WWI but is questionable as a standard feature of

creative production (Groys, 2010). In art, the latest ideas or media technologies are not necessarily more "advanced" than those of previous generations, any more than older ideas can necessarily be equated with either repressive limitation or irrelevance to the contemporary moment or repressive limitation. The essence of the most primary arts activities, such as drawing, can be discovered within the very structure of new forms of media, and can be related back to embodied experiences that form the presupposition of all arts activities. A camera relates to seeing, robotics relates to the mechanics of movement. In a relatively recent example of debates regarding technological progress and obsolescence in media, photography did not replace painting, but simply changed the ways in which painters engaged in the discipline or defined its scope of concerns (for example, photography removing the defining aim of representational verisimilitude in painting). Willem DeKooning (1968) observed that arts practice had a way of suspending our usual ideas of history and progress, suggesting that, for example, once a painter makes a mark on the canvas, they become simultaneously historical and a-historical, or immediately within a continuum of activity and influence identical to that of every painter who has engaged in the practice (p. 15). It took years of practice before this statement made sense to me, and I then realized that it was something that only occurred to DeKooning himself after years of practice. Before I was deeply committed to painting and had struggled with it and thought about it with any seriousness, historical paintings were done by other people in different eras. Eventually there was just painting sometimes me, sometimes someone else, sometimes in the present, sometimes in an era of great antiquity, sometimes my experience and training, sometimes that of others. There is obviously temporal history and change—definite events that either happen or didn't happen, but there is also an eternal present of craft practice that is not about individual or collective practitioners, nor really about time and progress, or inferior or superior technologies. As DeKooning put it in a documentary interview with filmmaker Emile de Antonio (1972), "There seems to be no time element, no period in painting for me."

Art, in some respects, remains circular and unfinished in any era; each generation simultaneously entering it as though the first and only generation to engage in the activity, in dialogue and communion with every generation of practitioners, and leaving loose ends and unexplored potentials as different (not necessarily *better*) concerns attract a new generation of practitioners. Such "loose ends"—whether a formal

approach or motivating question, can be taken up and re-examined through the experience of practitioners of any era. Art is not just in the practitioner but is also in the extension of the practitioner through the tools and processes associated with the craft; both may change and evolve but cannot be said to "progress" in the sense that they improve according to a universalized aim of some kind—less so if we believe that more complex technology is somehow responsible for such progress. No new technology, just as no philosophical construction, can provide a conclusive account of our embodied presence and activities in the world—each development in psychology, biology, social-or neurosciences presents new horizons in tandem with expanded knowledge.

Reliance on the manufacturing and purchase of technology itself raises other questions for artists and designers, including the socioeconomic differentials across societies or segments of society, and the inescapable fact that all technologies to some degree impose predetermined—*industry*-determined possibilities and limitations. Is dependency on these factors, and skill in their manipulation, what art is about? A carver might use tools and processes that would be familiar to a carver from four hundred or perhaps even four thousand years ago, a dancer moves their body—are not these still sufficient in themselves as paths of meaningful expression? Creative capacity is the practitioner's response to what is encountered in materials, technology, and everything else in experience, not just something wholly delineated by the tools they might pick up or put down.

3.8. Expanded Definitions of Technology

Foucault's (1988) use of the term technology bears striking relevance to arts practice, in that it bridges agency in production, the construction of meaning through language, institutional power dynamics, and personal transformation (p. 18). The following section will explore technology in Foucault's sense of institutional organization for the purpose of controlling or supervising behaviour (Behrent, 2013, p.55), which carries implications for artists as a precondition of creative process and comprises aspects of Foucault's variant definitions of technology. Judd (2019) speaks of the importance of artists taking up the responsibility for the definition of context in which their work is seen and suggests how closely intertwined the technology of Foucault's sense of the term is tied up with institutional support for artists, for example in constantly seeking support through corporate commissions and through constant applications for

government grants (p. 558). In Judd's estimation, the requirements of any gallery or cultural support system need not be accepted as the defining conditions of creative process, *artists themselves* best define the scope of their practice and thus transform the boundaries of practice. We might consider this full scope of influences as part of the "technology" of art, in that they are literally tools and processes that in part define what art is or could be. Such artist-defined practice is what has shifted the nature of what is possible in the public presentation of art since at least the nineteen sixties. The exhibition space, to remain viable as a mirror of the cultural moment, must respond to the artist's work, rather than the artist "self-conforming" in response to the parameters of institutional requirements. Educational institutions might similarly become responsive to organic changes in educational culture arising from the working relationship between educators and students.

A project by Austrian artist Martin Walde illustrates this point. In his as-yet unrealized work The Invisible Line (n.d.), Walde proposed to bring live rats into an exhibition space, confining them to a circular area of sand area solely using a perimeter of a sulphurous violet scent that rats find repellent (Rian, 2002). Predictably, the gallery found this problematic. As Walde relates, "They're afraid of the invisible line between us and the rats. It's about trust. Do they trust me? Do they trust the rats? Borders are never really clear..." (p. 152). In a related work for *Documenta X*, Walde introduced wax worms into a heap of corn flour on the floor of an exhibition space. As the worms reproduced, the curators became concerned they might be spread outside their food source, and suggested they be contained by an actual wall or barrier, a compromise to which Walde objected. Walde's intent with these works was to use the institutional rationalizations for added protections (insurance problems, threat of rat or worm infestation, public safety protocols) to make apparent the institution's underlying distrust of artists, and (especially) to expose the range of non-art related entities and protocols (insurance companies, fire and police department, municipal by-laws) that function as the "invisible lines" defining what is permissible in art. Although the safety policies and insurance considerations are of course valid concerns for any large organization like a gallery, Walde's proposals suggest the degree to which these are rarely brought to light as the ultimate defining context of creative production. Refuse to accommodate these preconditions and the work remains unrealized. As Walde continued, "All institutions are based on trust relationships. It includes the fire department, the police, and the morality

they project. It's real authority, something like what a child needs, but applied to artists. (Rian, 2002, p. 152).

3.9. Trust and Agency within Learning Communities

This situation is mirrored in educational practices, and it is for this reason I deliberately use the word "trust" in my introduction as a defining characteristic of the relationship between educators and students, a view echoed by Stommel (2022). Institutions may or may not trust educators or students to be responsible and intelligent actors who can forge their own relationships and define the scope of their practices. Students may not trust educators or institutions to provide what they need or act in their best interests; educators may not trust students as mature co-agents in inquiry. Institutions can both facilitate or disrupt the trust between educator and student.

A personal example may serve to unpack the complexities around this section's topic. Dr. Kenn Honeychurch was Dean Academic at NSCADU during my time there as a graduate student, and as a practicing artist himself cognizant of the occasionally diverging concerns of institutions and artists. Familiar with his research interests in transgressive arts practices in post-secondary education (1996), I invited him to speak to students in the Fall 2001 "Deviancy as Process" seminar, whose first meeting happened to be three days after the 9/11 terrorist attacks. In his discussion with our small group, he described how institutional policies for an institution like NSCADU consider a wide range of factors beyond those exclusively relating to creative expression, and that the larger the institution, the greater likelihood that such policies influence creative process rather than being responsive to the diverse individual needs of practitioners. This is partly what former NSCADU President Garry Neill Kennedy (2012) described as the inevitable bureaucratic inertia of institutions as their growth demands more complex organizational structures (p. xxiii). Nevertheless, this observation struck some students as hypocritical, particularly considering Dr. Honeychurch's (1996) research into the consequences of students engaging in the provocative avant-garde practices that they study in post-secondary studio arts programs. Dr. Honeychurch related personal conflict about this—as an artist he wholeheartedly understood and supported a student's right to engage in radical critique of social and institutional power structures, but as an arts administrator he was obligated to protect the organizational integrity of an institution serving the needs of a wider community of stakeholders.

It was in this discussion that the topic of trust and individual responsibility arose. "Trust" was taken to mean trusting ourselves, our intuitions, our capacities... but also a measure of trust in each other as members of a supportive (and critical) community of peers. "Responsibility" was taken to mean having the courage of one's convictions, to direct one's own path of inquiry. One of our first exercises in the seminar was a collective definition of the word "deviancy," from which we learned that the original word for a steering wheel was a "deviator" (from the first hot air balloons). This changed our notion of deviancy: rather than describing divergence from norms or opposing the mainstream, it was an act or process of self-determination in the sense of "charting a course" of inquiry. This discussion resulted in a series of verbal agreements between the students and me:

- (1) Students could do whatever they felt most compelled to do, but they had to reflect on the likely consequences of these actions and could not default to excuses such as "It's just an art project."
- (2) Their ideas had to be considered through both a conceptual and practical lens.
- (3) It was agreed that if students decided to do something illegal, they should not expect myself or the institution to intercede on their behalf for protection from consequences.
- (4) Students should not avoid doing certain things if they were convinced their idea should be realized in a particular way, regardless of perceived permission or prohibition, yet with reference to (2) and (3).

Our discussion with Dr. Honeychurch became a catalyst for deciding that we as a collective could define praxis independent of extrinsic regulatory imperatives. However, it was realized that for this to work, the projected consequences of our actions must necessarily be folded into our conception of creative process as a community undertaking, at risk of falling back into a psychology of relying on entities beyond our immediate concerns and values as a community to define the scope of practice. This shifted our conversations toward reflection on to what degree one's choices might in fact be transgressive or simply contradicting a vague notion of acceptability, and whether provocation was a worthy end, regardless of its historical role in avant-garde practices.

Common-sense questions such as "What do *you* think will happen if you make a sculpture that looks like an explosive device and put it on public transport?" also had a sobering effect, particularly when one considered the conflicting notions of permissibility in arts-related and non-arts-related communities.

Rancière (2013) describes how so much contemporary work relies on the half-conscious presumption that the artist's role is to somehow educate an otherwise unenlightened "other" (pp. 2-3). I agree that these inherited orientations of practice, themselves now a form of "technology" as they have been absorbed by cultural and educational institutions, can be both productively engaged and productively re-assessed. The best way for this to occur is for artists to take up the responsibility for defining and critically engaging the implications of their activities as "real-world," based on actual relationships in a shared world, and not just as symbolic art actions that rely on the abstraction of a perceived other.

3.10. Art as Commodity and Art as Inquiry

Like technology in the widest sense as a defining parameter of creative process, conceptions of what constitutes an artwork are closely related to art objects as products defined by certain expectations of market consumption. The formal qualities of artworks presuppose contexts of ownership or public display, whether a public or commercial gallery, private home, or business. Corporations or real estate developers may commission large-scale artworks for offices or projects; smaller businesses may have more modest works that serve a more design-oriented function. Artworks, in all cases, can run anywhere from purely decorative to signalling the owner's allegiance to ideas embodied in the artworks. By the same logic, artists can internalize the role of salesperson, engaging in online promotional activities and pitching proposals to galleries, curators, and corporations. In a related capacity, art educators might package and promote their own unique perspectives as methodology or theory. However, art production cannot be exclusively defined by the characteristics of commodities in commercial transactions. Although a market economy can potentially transform anything into a product, the "product" in art is also something more than what occurs in a monetary transaction. Particularly with reference to contemporary arts practices, what is being purchased is something like an idea or spirit, or even simply a totemic reminder of something that remains out of reach of commodification. Artworks can awaken deeper

pre- or non-commodification associations of materiality, something that may be more of a subjective response than an easily identifiable quantity. Kimmerer (2013) refers to the understanding of gift economy that remains vital in Indigenous culture, the understanding of a greater sensitivity to and latitude in our experience of materiality. In her example, sweetgrass for ceremonies can only be given or accepted as gifts, not bought or sold (p. 26-28). Cultures driven by market economies have perhaps lost touch with the existence of a fuller range of interactions besides monetary value and exchange, yet the slipperiness of our relationship to art suggests a continued awareness of a more expansive range of associations. The experience of art—particularly something of its ritual aspect—seems alien and mysterious in a consumer society, yet on some level a familiar and even necessary antidote. This may explain how the "cultural capitol" (Bourdieu, 2018) accrued by the most revered of artists tends to translate into economic capitol: we financially support artistic production because we don't have access to it in our everyday lives. We are perhaps more used to vicarious participation through consumption, so we revere and support those who can devote themselves to freedom of expression in literal or symbolic ways. Possession of an art object, poem, performance, or song in this way might become emblematic of what we wish we might have or could be, a way back to something we know, on some deeper level, is our birthright and common heritage of creative capacity.

The difference between art as inquiry and art as commodity is expressed by artists in various ways, although the pursuit of insight through organically self-defined modes of inquiry is a shared theme. Richard Serra described art as inquiry simply as "asking fundamental questions about what you don't understand" (Serra, 2001). Robert Irwin has elaborated at length on the step-by-step process by which motivating questions have driven the material "logic" of his practice, rather than identification with or adherence to any discipline or set of practices (in Feinstein, 1997; Irwin, 2011; Weschler, 2008). Like American conceptual painter Ad Reinhardt (1975, p. 82), Irwin asserts that the "art" of art experiences is immanent in everyone's direct experience of artworks, whose true significance and value is a re-orientation to our experience of the world around us, an experience that is somewhere in between perception and the art object itself (Feinstein & Irwin, 1997). In this approach, art as inquiry is centered on understanding how we make meaning of experience, not just how we accumulate and exert social or economic power or influence through material consumption. American

artist Lee Lozano summed up this view in a journal entry from 1970: "Do I want to study from books as [a] weapon to use when participating in the world? Or do I want to search for new knowledge/info systems, invent other ways of learning for myself?" (in Applin, 2016, p. 76). The first speaks to the weaponization of accumulated knowledge, the second to reflective inquiry, including *inquiry into inquiry itself*, as a means of self-empowerment.

Like Titchener's (1911) early research into the nature of attentional focus, Irwin understands that the primary means of understanding perception is the examination of one's own experience, which for the artist necessarily includes perceptual interactions with the materials and environmental conditions in which one is working. Yet this does not imply a desire to simply project one's subjectivity—art is not just about the artist's "special" perspective, but the ability to sensitize oneself to experience in order to devise ways to make an experience available to others. The artist seeks to understand what is there to work with; consciousness of our own perceptions and responses helps us to speculate how others might respond in similar circumstances. This follows from the assumption that art is not just an object but is part of a complex of experiences arising from conditions that are potentially open to anyone.

This is not a new or radical perspective—it is in fact part of foundational arts instruction. The "Interior/Exterior" exercise referred to at the close of the previous chapter is an adaptation of a familiar first-year sculpture exercise, in which students are asked to first itemize everything they notice about a space when others are present (usually the studio space in which they will be working), and then itemize everything they notice when in the same space alone. As my own instructor stated, "They are not the same spaces," although they are (of course) the same physical space. The deep influence of this exercise, which I first experienced in my teens in a foundation studio course at OCADU, is the likely reason I continue to spend time alone in my assigned studio or classroom before the beginning of a term: the space itself communicates a message of limitations and possibilities with regard to the coursework, a certain spirit or atmosphere with which to work, resist, or redirect. Are there windows? What is the light or noise level like at certain times of day? What kinds of activities are going on around the room? Can the tables and chairs be conveniently re-arranged if need be? This acts as a perceptual threshold from which interpersonal relationships will emerge when the class meets. This is no different (and no more "specialized") than Irwin's (1998)

reconnaissance of gallery spaces when invited to create a work, or his related notion of "in response to…" regarding formal invitations to teach. The sum of phenomena associated with the learning community at any moment can also comprise the materials and technology of artmaking—physical, environmental, perceptual, and social.

Chapter 4.

Methodology and System

4.1. Introduction

Despite contradicting the notion that artistic expression is more intuitive than consciously designed, all forms of creative process are dependent on methodological systems. Casual or even deliberately careless approaches with no specific aim or predetermined product can serve as an intentional framework or can be reverse engineered as a working process. *Methodology* and *system* are in part simply descriptive of how artworks are realized through specific procedures as praxis. Conscious reflection on creative process defines the nature and scope of practice, and in contemporary approaches can arguably represent the "content" of artworks as much as the artist's explicit statements of intent. Such reflection can be extended to the educational process as part of the defining conditions of creative process for educator and student alike. Both education and studio arts equally comprise discovery and invention, which, when turned toward the analysis of process, necessarily extends beyond knowledge acquisition or the specifics of technical training and becomes the central means by which one makes sense of the wider aims and possibilities of a domain of study. Educator- and student-practitioners are thus not only defining and exploring the history and current practice of a discipline but are actively re-inscribing the discipline through critical reflection of the content and processes inherent in their own activities. The following chapter will explore the ways in which studio arts and studio arts education represent a shared praxis whose values are expressed through specific yet potentially open-ended directives in methodology and system. I will argue that studio arts education is best served by self-initiated learning in combination with critical reflection and open dialogue. I will outline my adaptation of Arne Naess's semantic theory of precization toward these ends in studio arts and follow with reflection on the hybridized methodologies informing both my work as an artist and my doctoral research.

4.2. Prescriptive and Descriptive Methodology

Charles Sanders Peirce theorized that the most accurate definition of an object of analysis is a comprehensive account of how it is used, how it functions, what is tangentially related to it, and what qualities are peculiar to it (in de Waal 2013, p. 113). Such a *descriptive* definition is unavoidably a survey of relations between constituent elements, which, like the cohesive object of description, evolve and change over time. Definition, in this pragmatic sense, constitutes an array of possibly overlapping interpretations/conceptions that develop in response to actual practice.

This prioritization of description is also fundamental to John Dewey's (1934) conception of education. In "The Need for a Philosophy of Education" Dewey distinguishes between methodology as a projection of theoretical conceptions and methodology as practically grounded in observations of existing conditions:

It is sometimes supposed that it is the business of philosophy of education to tell what education *should* be. But the only way of deciding what education should be, at least, the only way which does not lead us into the clouds, is discovery of what actually takes place when education really occurs (p. 3).

As Bateson (1979) relates, methodology is predicated on explanation, and explanation is in turn derived from description (p. 44). Yet *what* we notice and *how* we observe is in part shaped by predominant tendencies and interests, which are themselves determined by a combination of sociocultural and uniquely personal influences and factors. Hence accounts of the same phenomenon may vary according to, for example, a predominant interest in semiotics, social or behavioural psychology, art, or mathematics. Similar to recent developments in Peirce-inspired educational theory such as *edusemiotics* (Stables and Olteanu, 2023), I propose that methodology in studio arts best prioritizes "description" over "prescription," or at least opens the process of perception, interpretation, and explanation up to comparison of particulars. This view generally accords with Bateson's (1979) advocacy of comparative methodology, which proposes that unique insight might be generated by means of disparate, perhaps unrelated approaches to observation and interaction regarding an object of analysis. In Bateson's example of binocular vision, in which one perspective is resolved in relation to a slightly different perspective, he relates how this "two-eyed method of seeing disclosed

an extra dimension called *depth*. The two-eyed way of seeing is itself an act of comparison" (p.97).

Rather than relying too heavily on extrinsically defined conceptions of practice, educators and students might turn their attention more toward the specific elements of their own practice as it unfolds, in the spirit of Whitehead's (1925/1967) observation that "We think in generalities, but we live in detail" (p. 37). The organic process of discovery is unique to each practitioner; over time we may discern identifiable patterns that might be recommended as productive or beneficial for certain purposes, but the constituent elements, aims, and projected outcomes of such a process are themselves subject to constant re-appraisal and evolution. Methodology and system may in this way be recognized as responsive according to the requirements of practice and might only be generalized in ways that are relevant to such requirements. The value of engaging in a spirit of creative problem-solving is not so much arriving at a solution, but in expanding one's awareness of relevant factors and reflecting on their potential relations. One might trace a series of observations from which to construct a model that communicates the possibilities of such relations, which can be iteratively formalized in varying degrees as a method or system. The value is perhaps not so much in system-building as a perceived virtue, or the potential of creating a universally relevant model of practice, but in the ongoing process of defining what is relevant or important in the context of one's activities.

4.3. Precization and "Potentialities"

One of my initial inspirations for pursuing doctoral work in education involved my experimentation with Arne Naess's work in communication theory and its potential application to self-initiated learning in studio arts. I was particularly intrigued by Naess's (1972) observation that "No precise version of a theory exhibits all the potentialities of its idea" (p. 70), a quote which I altered in a notebook to read: "No precise version of *an art idea exhibits all of its potentialities*," a statement close in spirit to point #12 of Sol LeWitt's *Sentences on Conceptual Art*: "For each work of art that becomes physical there are many variations that do not" (in Alberro & Stimson, 1999, pp. 106-08). I reflected that this observation applied to education as well—no single approach might be asserted as either comprehensive or normative. I began to see parallels between the kind of granular analysis of process in which I engaged with students as they moved

toward self-directed senior studies, and the kind of pragmatic emphasis on *descriptive* over *prescriptive* definition I had encountered in Naess's research. Naess might be said to have conceived systems as descriptions of *relations* between things that shift and evolve over time, which accurately reflects the condition of studio arts students—and artists in general (including myself)—find themselves in. This ongoing negotiation of the content, aims, and nature of practice is necessarily self-defined because the definition is constantly evolving in response to what happens in practice. No extrinsic characterization or label can fully account for the complex interplay between external conditions and agential responsivity. My task as an educator has thus been to facilitate, or collaboratively develop with students, capacities enabling the self-defined evolution of choices in practice.

Precization proves to be surprisingly relevant to conceptual and practical factors in creative process and studio art, although Naess had not conceived this work for these purposes. Precization, as I understood it, struck me as particularly applicable to self-defined inquiry in educational contexts, in that Naess proposes it as an organic means of interpretive analysis that can also serve to clarify one's values in relation to future activities. Precization distinguishes between our basic experience of a shared world that gives rise to speculative conceptualization and the representational forms that furnish specific expression to these cognitive processes for the purpose of self-reflection, communication with others, and directives for purposive activities.

As an applied communication theory, precization is intended to illuminate the limits of formal analysis of language as a representation of experience, and the ethics of communication in either speaking or discerning the intended meaning behind the words of others. To this end, Naess lays out the possibility of differentiating expressions and statements according to incremental specification, introducing a notation system to provide visual clarity: T₀, T₁, T₃, etc., which denote increasingly precise formulations of expressions in relation to given statements. The ultimate goal of this process is to be able to differentiate between genuine agreement and non-agreement when comparing usage of a particular term (rather than assuming either one or the other to be the case), and to train oneself to use thought and language skillfully in order to critically assess one's own use of language in relation to intended meaning, and to simultaneously discern what meaning others intend to convey as independent of one's own biases as is possible or practicable.

4.4. Precization and Dialogical, Self-directed Learning

I first took notice of possible parallels between precization and issues specific to student-defined inquiry in art with Naess's discussion of slogans. Slogans, in Naess' terminology, would qualify only as "low-level precizations" (T_0), meaning they have not yet been specified in one direction or another as definite assertions. But rather than having a negative connotation, Naess argues that such states of ambiguity are rich in interpretive possibility. Because ambiguity and diverse interpretation are naturally built into the practice and discussion of art, precization provides a model for the potential clarification of one's position in relation to an artwork (which, in Naess' view, is always a statement of one's values and worldview, if not a completely-worked-out philosophy), or, if one were to use his notation system to plug in terms and phrases associated with directives for generating an artwork, precization becomes a practical means of clarification of intent, procedure, and realization of an artwork . In this way, precization starts to resemble design process workflows, but with the added dimension of the psychology of intent, which could potentially have indeterminate, vague, or uncontrolled/uncontrollable results as a goal.

The basic system of precization parallels the arc of the sequential yes/no questioning that plays out over the course of an artist's development, which in education takes the form of literal dialogue between students and peers or instructors but is also an ongoing *internal* reflective dialogue regarding one's activities. However, this process can also be used to retroactively chart the development of one's attitudes and interests, which may provide insight for future directions.

This line of questioning is also similar to what transpires in formal critique and advisory sessions between art instructor and student at the point of independent or self-directed study. For example, an instructor may ask what kind of work the student would like to pursue that semester. The answer "Painting" would qualify as a low-level precization (T_0). Not problematic for not being more specific, just open to a greater number of potential avenues of clarification. The active pursuit of just "painting," even without further conscious delineation, would sooner or later reveal certain discriminations and paths at the expense of others, in other words, sequential levels of precization (T_1 , T_2 , ... etc.). Every step in a sequence represents a binary choice between one direction or another, although this does not preclude the possibility of retracing one's steps to

explore a previously untaken path. Whichever direction is taken, the student must have some specific means of proceeding in mind, if only the material decision to, for example, make a painting instead of a sculpture or photograph, and then to work on a stretched canvas with oils instead of rice paper with ink. Even these simple material or processual choices carry several conceptual associations that can be further explored or deferred, should the student not have any idea how to proceed.

For example, American minimalist painter Agnes Martin noticed the slight curve of ruled pencil-lines on stretched canvas when laying out grids for a painting. Making this observation the central focus of her work carried a certain resonance in the context of minimalist art practices that similarly explored how organic processes can undermine the integrity of designed systems. This insight, rather than being theorized or planned, was discovered in practice as a basic (perhaps mundane) material fact: straight lines become curved as the surface of the canvas gives way under slight pressure.

Through active speculation on the part of both instructor and student, the student may not only realize they have a very specific kind of procedure and aim in mind, but that their interests may potentially be expressed in a variety of formats, each of which might further determine the nuance of process and aims, as was the case with Martin's work. "Methodology" may in some cases be the wrong term to describe what are essentially conversations between student and educator, but if we want to get a clear handle on how to proceed with a body of work, or want to replicate certain results, a formal analysis of causes and effects may be necessary. A provisional mapping of avenues of dialogical exploration may look like this:

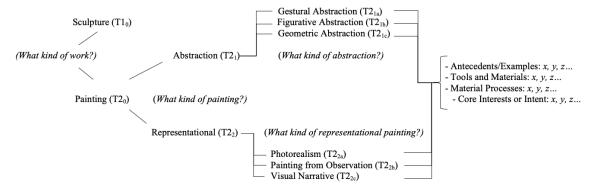


Figure 4.1. Defining the scope and trajectories of interests.

However, it is possible that after reviewing "core interests or intent," the student may realize that it is not so much gestural *painting* that interests them, but embodied movement itself, from which new avenues of format and process might be explored:

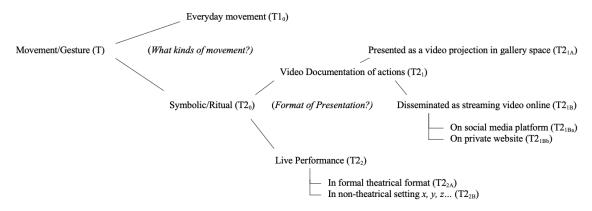


Figure 4.2. Example of incremental clarification of interests.

These chains of increasing specification, as a quick series of notations in answer to various questions posed by an advisor or by the student to themselves, can succinctly outline a practical structure for inquiry and suggest new directions for the active realization of one's ideas. Although these diagrams are endlessly adaptable for any range of topics or requirements, they are not without their own difficulties when applied to art. For example, no single notation system is of sufficient complexity or coherent organization to account for the interplay of material and conceptual and motivational considerations; several interdependent diagrams may be necessary to describe the relevant dimensions of practice. For everything that is described, there are inevitably elements of process that remain unaccounted for. Nevertheless, what is most beneficial is that in any sequence the directives are increasingly particular and self-generated according to the logic of the intent, rather than being a priori delimited by the instructor in the form of a general assignment or according to any predetermined theoretical, ideological, or defining technical craft framework. If followed through, affinities between the student's work and the concerns of other artists may be suggested and could be pursued as supplementary research. Moreover, that this process is self-directed does not preclude being taught by others, for example, the decision to access technical training in pursuit of a defined goal.

The collaborative construction of these diagrams prioritizes dialogical relationships, using conversation as a means of consciously structuring both practical

activities and conceptual or value orientations in practice. It also furnishes an alternative to the familiar studio educational process of providing historical and contemporary examples as models to be emulated in terms of content and form. If the basic premise of contemporary arts practice is that we each embody culture and that the boundaries of creative expression are open enough to encompass almost any approach, education predominantly by immersion in examples runs the risk of setting a precedent of reproducing what already exists through dependence on prescriptive modeling. If the desired outcome is indeed discovery and invention through independence of thought and practice, an alternative approach must be formulated. Naess's interpretive theory provides one means of facilitating a direct engagement in diverse craft principles (keeping in mind an expanded definition of "craft" that encompasses the skillful use of any means believed appropriate for the realization of an artwork), as well as the tools and guidance necessary for the judicious application of critical reflection on process. Precization may be helpful as students learn to integrate these elements as a cohesive set of practical and cognitive orientations necessary for independent studio production.

4.5. System, Habit, and Attentive Consciousness

Precization suggests the necessity of further differentiation between habit and system, either of which can be limiting or enabling. In art, habit can be related to training perception or response to the point it becomes a reflex action, in the way we might, for example, learn to drive, play a musical instrument, or perform any number of sequential activities. Systems, on the other hand, might describe a range of phenomena from a general organizational framework to consciously structured means by which habits are inculcated. If the goal of training is to induce automatic response, this necessarily requires attentional focus and awareness of one's behaviour and thought processes. We need to be aware of what we are doing before we can change what we are doing or the way we are doing it. Self-awareness, and sensitivity to conditions and our responses to them, thus might describe aspects of habit and training as they influence artmaking. Such attentional focus is close to the description of some forms of contemplative practice, where our awareness of habits of mind and behaviour partly comprise the aim of maintaining a disengaged yet attentive consciousness. Moreover, we need not become inactive to become attentive—insight can also occur during activity. Conscious

awareness of our thought processes and behaviour—how we think and act in contexts of immediate and more long-term activity—is in part the essence of self-defined inquiry.

4.6. Un-Skilling

Artists have long sought ways of avoiding predictable patterns of perception, process and result, often inventing forms of "un-skilling" as a means of gaining fresh perspectives and unpredictable, hopefully novel results. However, even un-skilling is itself a structured methodology in that it prioritizes unpredictable alternatives over habituated response.

Systematic un-skilling is discernible in traditional drawing exercises such as blind contour drawing (drawing while focusing on the object being drawn rather than the drawing itself) but also in a variety of minimalist theories of praxis that have exerted a great deal of influence on contemporary studio arts, as exemplified by quasi-polemics such as Ad Reinhardt's (1991) "Art-as-Art Dogmas" or Sol LeWitt's "Sentences on Conceptual Art" (in Alberro & Stimson, 1999). A closer examination reveals how these texts are not so much intellectual exercises as tools supporting greater critical reflection on material process. They could be said to support both *un*-skilling and *re*-skilling according to self-determined contexts of practice.

Reinhardt's "dogmas," or provocative statements of recommended practices, were equally influenced by early twentieth century Avant-Garde manifestos and the paradoxes found in Buddhist philosophy and scripture. Reinhardt's (1999) "Twelve Technical Rules" (p. 205-07), for example, rejects everything one might commonly associate with painting and art in general, such as colour, texture, gesture, etc.:

- ... 5. No design. "Design is everywhere."
- ... 9. No time. "Clock-time or man's time is inconsequential." There is no ancient or modern, no past or future in art. "A work of art is always present." The present is the future of the past, not the past of the future. "Now and long ago are one."
- ... 12. No object, no subject, no matter. No symbols, images, or signs. Neither pleasure nor paint. No mindless working or mindless non-working. No chess-playing. (p. 206)

This text truly comes alive when the full range of statements are utilized as an exercise for painting students of some maturity and accomplishment. In a Fall 2005 senior painting class in the ECU transfer program at North Island College, I invited students to read through Reinhardt's "Twelve Technical Rules" and attempt to make a painting that fulfilled its contradictory directives. Although this is nearly impossible for anyone to do, what occurs in the process is a heightened awareness of the diverse materials, processes, and mental orientations involved in painting, as well as how we each internalize its cultural "baggage" in our own ways. Through such reasoned evaluation one gains perspective regarding the habituated delimiting of these potentials, which are sometimes conscious choices but are just as often default modes shaped by unexamined bias or the comfort of the familiar. Students in the 2005 class began to see accepted disciplinary boundaries as somewhat arbitrary, wondering, for example, about the possibility of accentuating the sculptural or performative aspects of painting, or reanimating canvas painting's earlier associations with related textile work such as needlework and tapestry. Notable responses to this exercise were a six-by-six-foot painting created exclusively with hand carded felt from wool a student had sheared from a sheep, and a roughly twelve-by-twelve-foot painting on canvas whose striated patterns were exclusively created by residue from incoming and outgoing tides of different heights in the Salish Sea over the course of three weeks. In both cases, the artists discussed how they recognized the interdependence of material, performative, and conceptual aspects of painting, some of which were manifestations of their own agency and some of which were derived from extrinsic processes beyond their ability to completely control. Most students noted that even if they were not quite satisfied with the results of their explorations, they expressed doubt that they would have arrived at such novel approaches without Reinhardt's negations inducing such an exasperating process of elimination. When backed into a corner, the mind comes alive with speculative possibilities.

Sol LeWitt's "Sentences on Conceptual" (in Alberro & Stimson, 1999) has perhaps exerted more influence than Reinhardt's polemics due to its general adaptability to any discipline or modality in creative production. LeWitt wrote this document more as a set of reminders to himself regarding his own studio work, but its potential applications are universal as design or production principles, touching on general directives that combine material process and cognitive or attitudinal orientations:

- 1. Conceptual artists are mystics rather than rationalists. They leap to conclusions that logic cannot reach.
- ... 5. Irrational thoughts should be followed absolutely and logically.
- ... 7. The artist's will is secondary to the process he initiates from idea to completion. His willfulness may only be ego.
- ... 19. The conventions of art are altered by works of art.
- ... 22. The artist cannot imagine his art, and cannot perceive it until it is complete.
- ... 23. The artist may misperceive (understand it differently from the artist) a work of art but still be set off in his own chain of thought by that misconstrual. (pp. 106-08)

The spirit of this document parallels Polya's (1958) definition of modern heuristic as "methods and rules of discovery and invention" that consider "the mental operations typically useful in this process" (pp. 130-31). Durbin (1968) connects heuristic to inductive reasoning, or the recognition of patterns of plausible relations and statistical probability (p. 87-89). Like Polya's conception of heuristic, LeWitt's statements do not make distinctions between intuitive or analytical processes—an intuition can be validated through conscious reflection and verification, or a highly rationalized system applied in new situations based on little more than a hunch or in a spirit of experimentation.

LeWitt's "Sentences..." not only suggest the potential interplay of creative and analytical modes, but also that the circumvention of cultivated habit, as much as the judicious application of habituated response, is a necessary feature of generative process.

Education can similarly be considered as a process of cultivating or resisting habits of choice, not only in the mechanics and content of a discipline, but in the social dynamic of critical dialogue. As LeWitt implies, limitations can be enabling, but it is largely our response to the limitations that is important, not necessarily whether it is us or someone else who defines the limitations. Defining them for ourselves seems most desirable but does not necessarily result in "better" work, yet neither does indiscriminately subscribing to extrinsically defined limitations as preferable due to their supposed "objectivity"². As with Polya's recommendations for problem-solving, LeWitt

_

^{2 &}quot;25. The artist may not necessarily understand his own art. His perception is neither better nor worse than that of others." (LeWitt, in Alberro & Stimson, 1999, pp. 106-08).

implies the necessity of getting out of one's own subjectivity and making aspects of design process available to more general scrutiny through dialogue. It doesn't matter whether it is the educator or student who comes up with a good idea, just that conditions are such that a variety of ideas can be put forward, actualized, and actively evaluated for their relative merit.

4.7. Teacher-Learner "Transposition"

The above range of issues might be productively transposed to the respective roles of teachers and learners in educational processes. However, both Buddhist and gestalt perspectives offer opportunities to observe features that cut across clear distinctions between teaching and learning, in the sense of Naess's (2009) observation that "No entities exist that do not have the character of processes" (p. 198). For example, it is possible to more flexibly enter into modalities peculiar to the role of student or educator, such as attentive listening or the forms of "projection" more common to the work of educators (explanation, monologue, the subtleties of social directives and management of activities and environments). With the experience of team-teaching, educators have opportunities to observe themselves "changing gears" at intervals, sometimes summoning the energy to "take charge," sometimes relaxing into a more passive absorption of or participation in activities organized by others. Although the format of seminar courses is intended to democratize teacher-student relations to a degree, this often proves difficult in practice, perhaps due to how deeply embedded the sense of our contextual "role" and its related attributes have become. The division often runs along the lines of active or passive behaviours—the expectation to either define, manage, and direct or absorb, digest, and reflect back what is presented. Although such distinctions are clearly appropriate in some circumstances, they are not universally applicable and, in some cases, might actually become impede a growth mindset. What is sometimes required is the cultivation of one's ability to both learn and un-learn habits of thought and behaviour associated with the perceived roles of educators and students. In some respects we are all simply fellow inquirers, although perhaps of different levels and kinds of experience, interests, and intentions.

On one hand, it is easy for myself, as an educator, to decide what is most beneficial for students to do, especially if I recognize that the student is locked into certain habituated patterns of which they may not be aware. However, educators may

also be locked into habituated patterns, such as offering advice according to their own interests or unexamined bias. It is important for both student and educator not only to recognize such patterns of response, but to recognize one's ability to consciously set them aside in favour of alternative ways of thinking and acting. An important reason we might engage in student-teacher or peer-to-peer dialogue is to bring these patterns to light and openly discuss alternative possibilities. Regardless of official institutional roles or how we self-identify, we are all simultaneously influencing and being influenced by all members of a learning community. No possibility is necessarily more "right," given the limitation of our subjectivities as informed by our interests and values, but gaining perspective outside our own subjectivity arguably has the most long-term benefit of flexibility of conceptualization and action. This is in fact common practice in design coming up with as many possible approaches as a team and weighing their relative merit, so that blind spots regarding alternative possibilities are more quickly revealed. It is also part of experimental scientific process—seeking to mitigate confirmation bias by entertaining multiple perspectives or plausible interpretations. Ideas for design, musical compositions, or artworks can be variously reinterpreted and translated into different forms, either by us or others. The simplest example is Marcel Breuer's B3 or "Wassily" chair, which was translated from its initial De Stijl-like geometric forms in plywood to its iconic bent aluminum frame and leather (Phaidon, 2016). Breuer's inspiration for the material translation of his design came from yet another transposition—observing the drop bars on an Adler road-bicycle he had just purchased. The "transposition" of teacher and learner through dialogical interaction is no different.

The identification of the artist with the cultivation of what is presumed to be a special, individual "artistic" perspective and expression can inadvertently limit the possibility of generative response. The same can be said of an instructor presuming a unique "knowledge" or skill to impress on students, or of a student's attitude that their work is "practice" as opposed to a committed expression that is valid in its own right. In both cases, identifying too much with a preconceived sense of one's role or identity can even act against a more expansive perspective because one may make choices as to what actions or expression are appropriate to their self-conceived identity as an artist, which is a different question than what might serve a genuinely novel approach. The cultivation of one's identity as an artist (or student- or educator-practitioner) and how this

translates into value priorities and choices of action, is perhaps the most difficult habit to perceive without the mirroring of peers and advisors.

4.8. Love-Knowledge and Power-Knowledge

Is creative process governed primarily by organic or linear forms of analysis and organization? Some aspects are clearly identifiable as rational—even instrumentalized processes, yet others suggest the influence of at least partly sub-conscious associations that are more difficult to trace or quantify. In a close parallel in psychological research, Epstein's (2010) "Cognitive-experiential self-theory" (CEST), distinguishes between "intuitive-experiential" and "analytical-rational" modes of information processing, outlining the respective strengths and weaknesses of these orientations (p. 302). Of relevance to creative production is Epstein's recognition that rational analysis can be productively applied to intuitive-experiential activities, yet intuitive-experiential modes nevertheless "influence rational system without the rational system knowing it is being influenced" (p. 302). In the nineteenth century, Ralph Waldo Emerson similarly noted that rational analysis is often applied to a flash of insight, functioning predominantly as a means of critically assessing intuitions (1981, p. 281). Such a process that combines vague intimations with reflective reasoning, especially as developed in dialogue with others, can be acknowledged as forming the basis of a more formalized working process. methodology, or theory regarding creative production.

The central paradox of studio arts is that the artmaking process is not linear, but linear material/technical processes comprise the primary means of an artwork's realization. The question of instrumentalized control often arises in creative process: to what degree might a practitioner wish to manipulate process for specific projected outcomes? Does such an emphasis on control impede the flourishing of intuitive insight and the emergence of new, unexpected forms of expression? "Ethics" may be too strong a word to describe the contradictory drive toward either discovery or control, but the practitioner's emphasis of one or the other will ultimately define the character of creative production. Bertrand Russell (1931/2008) recognized similarly opposed orientations in scientific inquiry, noting in this case the ascendency of what he termed "power-knowledge" over "love-knowledge":

Science in its beginnings was due to men who were in love with the world. They perceived the beauty of the stars and the sea, of the winds and the mountains. Because they loved them their thoughts dwelt upon them, and they wished to understand them more intimately than a mere outward contemplation made possible... But step by step, as science developed, the impulse of love, which gave it birth, has been increasingly thwarted, while the impulse of power, which was at first a mere camp-follower, has gradually usurped command in virtue of its unforeseen success. The love of nature has been baffled, the tyrant over nature has been rewarded. (Russell p.197)

Russell contrasts a desire for power through manipulation with the contemplation and appreciation of something as it is, perhaps (as might be the case in either art or the natural sciences) a desire to understand an object of curiosity without the compulsion to erase its mystery through explanation or control. Love-knowledge implies care for and non-interference with qualities intrinsic to the object of interest, whereas power-knowledge emphasizes the expanded scope of control as an end in itself:

The lover, the poet, and the mystic find a fuller satisfaction than the seeker after power can ever know, since they can rest in the object of their love. Whereas the seeker after power must be perpetually engaged in some fresh manipulation if he is not to suffer from a sense of emptiness. (p. 198)

Russell describes the early Ionian philosophers' passion to understand the "strange beauty of the world," borne of a love of the natural world "almost like a madness in their blood" (p. 198), as being slowly replaced with a more exclusive concern with control over any object of contemplation. Material, nature, and even the human mind (including its reflective capacities) become instrumentalized as tools and resources to realize projected aims. Although such an emphasis on instrumentalization may be a general (although not exclusive) trend in scientific inquiry, it is not necessarily the case in artsbased practices, which tend to vacillate between instrumental and contemplative orientations, thus complicating Russell's more strict polarization of love-knowledge and power-knowledge. The drive toward control in the arts may not be so categorical or extreme—for example, it could be the drive toward proficiency in technical process for (paradoxically) at least partly non-instrumental ends, such as the satisfaction of one's curiosity. The drive toward technical proficiency in craft practice cannot be exclusively associated with a desire for control at the expense of appreciating intrinsic value. The notion of "skill" may denote instrumental control as much as a sensitive understanding and engagement with diverse elements of craft. For example, a carver comes to understand the connection between professed conceptual/value orientations and the

inherent properties of different kinds of tools, processes, and materials (Vogel, 2015, p. 26-29), or, to use a non-art example of physical activity, the surfer understands the connection between such orientations and the participatory requirements demanded by the mechanics of a wave. Although perhaps extreme, the surfing example exemplifies the fusion of love-knowledge and power-knowledge: because natural forces have a power beyond the control of the surfer, they must—of necessity—be understood and respected to actualize the practice (and in this case, attuned to so they do not result in physical harm). Emerson (1981) referred to how our capacity for conceptual analysis or system-building is intermingled with intuitions of relations between things outside the organizational control of the mind:

It is a secret which every intellectual man quickly learns, that beyond the energy of his possessed and conscious intellect he is capable of a new energy (as of an intellect doubled on itself), by abandonment to the nature of things... (p. 316)

Both creative and educational practices offer opportunities for either resisting or "abandoning" oneself at least partly to the "nature of things"—ideas, material properties and process, situations, or conditions. Such abandonment does not represent a limitation, but rather, in the sense of Naess's conception of gestalt ontology, the ability to integrate more particulars into an expanded sense of one's identity (Diehm, 2006).

4.9. Dissertation Format: Organic Design Process as Methodology

Regarding the conceptual structure of my dissertation, Creswell's (2014) description of qualitative research both complements and inverts Pio's (1988) description of the form of Buddhist analysis found in the *skandhas*, where the whole is broken down into constituent parts for closer analysis (p. 7). Creswell describes qualitative research as "data analysis building inductively from particulars to general themes, and the researcher making interpretations of the meaning of the data" (p. 4). Both approaches account for subjective perspective and interpretation of relationships between part and whole—for example, exactly what constitutes the "data" of qualitative research, or, as my dissertation outlines, what exactly are the "constituent parts" of a given object of inquiry. Starting from either extreme of a continuum, each describe a movement from granular detail to generality.

Bergson (1955) contrasts intuition and analysis in ways that are perhaps closer to how I have been thinking of the skandhas in relation to my dissertation. For Bergson, intuition is an "intellectual sympathy by which one places oneself within an object in order to coincide with what is unique in it and consequently inexpressible," whereas analysis "the operation which reduces the object to elements common to it and other objects..." (pp 23-24). Bergson's characterization of analysis as the conceptual reconstruction of direct experience suggests he is speaking more of the relationship between intuition and verbal or written expression. As I considered this interpretation of Bergson, I reflected on how I have found the process of finalizing the scope and content of my dissertation by turns rewarding and unsatisfactory: language requires a clearly delineated, sequential development of ideas, yet art, memory, and the flow of various dimensions of experience tend not to be linear. Language becomes its own design structure apart from the persistent yet vague feelings or images informing the topics I have written about. Part of this is due to the translation of non-verbal somatic experience—it can be described but the description is in the realm of language, not direct experience of the creation or perception of artworks. I prefer Naess and Hannay's (1972) more conciliatory view, here speaking about the fundamental difference between Western and Asian traditions in philosophy, which are similarly bounded by distinctions between compartmentalized analysis and intuitions of ecological relations:

It is really a matter of convention whether one calls such views 'speculation' or 'elaborations', rather than 'analyses'. If one thinks of an analysis as a breakdown of the constituents of some specific and clearly identified phenomenon, then the word will not seem apt.; and similarly if one associates with analysis a certain procedure or set of conceptual tools. But in fact any claim about the *nature* of some selected phenomenon is part of an 'analysis' of the larger set of those phenomena in respect of which the nature of the former is partly determined. And a description of a part is a part of an analysis of the whole.

... To begin with a specific conception of the unity of experience will strike many Western philosophers as putting the cart before the horse. What is needed, they will say, is a clear statement of the method for stating and justifying such conceptions. Then it remains to be seen which, if any, *can* be stated and justified. The possibility we are venturing is that even such an apparent preliminary as stating a method can involve giving expression to a certain conception of the unity of experience. (p. xiii-xiv).

The variability of elements that comprise the artmaking process recommend something closer to a "pragmatist" approach, which Creswell (2016) describes as "not

committed to any one system of philosophy or reality," requiring "... many approaches for collecting and analyzing data rather than subscribing to only one way (e.g., quantitative or qualitative)" (p. 11). It is possible to interpret elements of creative production according to any of the four general orientations identified by Creswell as informing either quantitative or qualitative research design: Postpositivist, Constructivist, Transformative, or Pragmatist (pp. 5-21). My own approach to this dissertation suggests an integrative process like that to which I gravitate in educational and studio practice, incorporating structured (yet provisional) forms of design that make space for organic modification in response to contingencies. These "contingencies" arise from the unplannable aspects of circumstantial conditions or social interactions. There must be some way of accounting for the influence of random factors in creative and educational practices—casual conversations or unexpected encounters with people, ideas, tools, and processes that change the direction of one's activities. I struggle with ways to present a clear account of the social relations and events that comprise important features of my experience as an educator, tending toward the autoethnographic. For myself, autoethnography operates in ways like "re-statement" lines in drawing, in with the artist observes something and experimentally retraces contours in search of an accurate description. My memory of events that I have related in my dissertation are presented as a perspective among many possible perspectives of the participants, not as a defining perspective. I extend the same speculative attitude to my own ideas—I may be the agent by which an idea comes into being but do not see my expression of the idea as either definitive or the best possible formulation. My understanding of "experimental methodology" is perhaps closer to Creswell's definition of pragmatism than one predicated on a stereotyped notion of scientific research assuming the possibility of universal measurability or quantification. For myself, the interwoven dimensions of the artmaking process lead the practitioner toward acknowledgement of the limitations of either objective measurement or subjective speculation as normative orientations. Drawing on diverse methods may be the only way to account for the facetlike dimensions of our experience as expressed in creative production.

This debate between subjectivity and objectivity as representing fundamental "truth" has repeatedly brought me back to several related ideas that were the focus of Whitehead's philosophy of science, each of which have bearing on methodology: the "bifurcation of nature into two systems of reality" (Whitehead 1920/2015, p. 30), the

"fallacy of misplaced concreteness" (Whitehead 1925/1967, p. 52), and his subsequent meditations on the relations between variant modes of human experience, particularly regarding conflicts between scientific, aesthetic, spiritual, and affective aspects of experience.

The "bifurcation of nature" refers to a paradox that Whitehead perceived in physics, rooted in historical and philosophical debates that informed modern experimental methodology. Although initially relying on sense-data, physicists construct conceptual and speculative systems stripped of supposed "secondary" (sense-related) and "tertiary" (aesthetic, ethical, and religious) qualities (Whitehead 1920/2015, p.148). Yet, as with the debate between Rationalism and Empiricism, there is ultimately no basis for abstraction except as derived from sense-related phenomena, so it is questionable whether, for example, selective abstract quantifications such as mass, frequency, or distance can be rightly elevated to the status of "primary" reality, and all other qualities relegated to secondary or tertiary status as supposedly illusory derivatives. Whitehead not only took the position that each of these modes of experience had at least equal claim as "primary," but that they were in fact interdependent (Whitehead 1920/2015, p.148).

In a similar vein, the "fallacy of misplaced concreteness" refers to the confusion of abstract conceptualization as something akin to physical "fact" or reality, which can engender identification with and defense of ideas as conceptual objects ("real things" on par with physical facts). The subtle confusion of abstractions as concrete "realities" can presumably be manifested across a broad range of human endeavours, resulting in, one might extrapolate, dogmatic belief systems, unexamined biases, or inflexible ideological stances. Whitehead resists making a hierarchical distinction between, for example, the "truth" of the affect of viewing a sunset from the "truth" of an understanding of the optics and physics giving rise to such an experience, or, as he puts it, "... the exclusion of value from the essence of matter of fact" (Whitehead 1925/1967, p. 96). Each of these constitute one among a variety of potential modes of perception. However, although in certain respects one mode is not necessarily more or less "real" than the other, distinctions might still be made regarding the degree to which something corresponds to, for example, either physical actuality or subjective intuitions. In this way, not all modes of perception are "equal" in all regards. This partly explains Whitehead's injunction that theory and speculative philosophy, despite being a project characterized by the free rein

of imagination, nevertheless cannot avoid an obligation to correspond to actualities, and whose generalizability (in the same sense as demonstrated in classic experimental physics) is in part a measure of the validity of their proposals (Whitehead 1929/1978, p. 5).

These perspectives inspired reflection on what I believe my dissertation recommends as beneficial practices. It is true that any theoretical or practical framework can be rendered as methodology or system, but I have struggled with the idea of framing my observations as guiding principles of practice except in very general terms. As Stommel (2022) notes, perhaps we don't need yet more methodology, but simply a more fulsome engagement with the specific context and conditions of our own practice. particularly in direct relationships with other people. My conception is similar to Naess's (2005) use of a Deep Ecology "platform," in which he distinguishes between a general set of normative principles and their manifestations as specific practices (pp. 339–59). In the context of his research, Naess asserted there need not be a single "ecosophy" but many variants of "ecosophy" that could contribute to an endlessly enriched field of practices. Although I set aside the very idea of "norms" in arts practice, I thought it possible to identify conceptions of universal elements of practice as a starting point for discussion. For example, it is hard to avoid consideration of materials and technology, or the role of tradition and emulation, because they are so heavily implicated in so any aspects of arts practices. Other aspects may be open to interpretation. When such identification of constituent elements is combined with the understanding of their interdependency, as exemplified by the skandhas, this overall conception of methodology seems appropriate as a means of acknowledging and accommodating the diversity of possible outlooks regarding creative process, either in the analysis of process or as a defining (yet variable) framework of directives in creative activities. This changeable "diversity" applies to the activities of each individual practitioner as well; I have occasionally entertained the notion of redefining the focus of each chapter and have heard more than one version of such alternative frameworks from colleagues and students with whom I have shared this idea. Again, it is not a matter of debating a hierarchy of primary, secondary, and tertiary conditions, or arriving at a single comprehensive universalizable set of definitions but engaging in the very process of discussing how and why we believe the creative enterprise might best be characterized a certain way. Such a dialogical conceptualization of methodology is necessary in

educational contexts, especially in a domain of practice where students and educators alike are engaged in an ongoing process of evaluating and redefining the scope and content of their inquiry.

As Serra (2011) noted, redefining the "tools" appropriate to one's explorations perhaps forms the greater part of what artists of each generation do; methodology is perhaps the most general but far-reaching tool that sets the conditions for what is done, how it is done, and for what reason it is done. No single outlook seems universally appropriate or applicable to something as diverse as arts practice. I personally find it less interesting to concentrate solely on arts practice than to think about creative capacity in general—this perspective seems to offer a more open-ended opportunity for how I might think of what I do as an artist and educator. Art doesn't have to resemble what we are familiar with as art, and no single universalizable definition explains everything about what art (or arts education) might be.

Chapter 5.

Tradition and Emulation

5.1. Introduction

Art simultaneously defines—and is defined by—cultural tradition. Art production is something that develops organically over time, and traditional and contemporary practices, although they may seem distinct, are part of a seamless continuum of response to both historical and present-day influences. Tradition can be defined by an orientation of values as much as by a particular material or technical process. The notion of tradition is also based on *selective* interpretations of history, which, as T.S. Kuhn (1970) notes, tend to be informed by the needs of those surveying a historical record from a contemporary perspective.

For both art educators and arts practitioners, particularly in diverse communities, there is a practical question relating to tradition: what cultural reference points, craft practices, or conceptual frameworks represent the "foundational" aspects of a discipline? It is worth considering to what degree our conception of the basic components of art practice are unconsciously normative or prescriptive, and to what degree we are willing to investigate alternatives to these conceptions.

Educators must also consider the implicit values associated with tradition, as well as the illusion that traditional values in craft practice are fixed and unresponsive to contemporary conditions. The invocation of "tradition" communicates the idea of longstanding practices that have withstood the test of time due to their perceived efficacy or value, in contrast to the perceived ephemerality of current practices. The implication is that continuity or persistence might be favoured over novelty or innovation. It is difficult to see mundane aspects of contemporary experience, such as digital media and popular culture, as part of a cultural inheritance, yet they may be no different from what were once perhaps commonplace or arbitrary factors of everyday experience in the past that informed what are now considered tradition. Cultural heritage is continually shaped in the immediacy of present-day concerns.

Another factor in a contemporary understanding of tradition is widespread accessibility to large amounts of information through digital technology. In contrast to previous generations, humanity is no longer tied to place in the same way—we are generally more "international" citizens with greater mobility, less isolation, and more of a consumer mentality toward culture. Greater numbers of people consuming the same media through the same communication technologies can have a "homogenizing" effect on both opinion and imagination. We may be tempted to believe that because so much information is so readily available, that what we encounter on the internet represents the totality of inherent possibilities. This, however, is an illusion: individual practitioners continue to generate new forms through unique combinations of interests, material affordances and limitations, and capacities for invention, as has been the case at any point of human history. Across disciplines, emulation of masterworks becomes a preface or springboard for innovation; the student absorbs the accumulated knowledge and "power" of the teacher not just to perpetuate tradition, but to find opportunities for making one's own unique contributions in a neglected or unforeseen corner of the practice.

What place does tradition have in a contemporary setting where access to so much information inspires so many competing and hybridized art forms? Indian musician Ravi Shankar, after years of experimenting with intra-cultural approaches to music, sought to preserve and promote the oldest traditions of Indian music (in Kidel 2001). He pointed out that traditional Indian music had persisted for close to three thousand years exclusively by means of direct interactions between teacher and student. Such traditions, like the ecology of a rainforest or even the cultural ferment of older neighbourhoods in major cities, evolve into unique combinations of elements whose complexity is difficult—if not impossible—to consciously design or manufacture. Something precious can be lost when we undervalue or neglect the organic cultural inheritance of disciplines.

Nevertheless, the essence of such inheritance may persist even if contemporary approaches do not appear to reproduce the surface appearance of traditional forms. American artist Robert Irwin describes how becoming an artist in the true sense was for him the shift from a concern with outward appearances—genres, "styles," etc., to actively inhabiting the motivating questions underlying artworks of any era (in Weschler & Irwin, 2008, p. 125). Some questions are of such vitality that they transcend

designations such as traditional or contemporary; they are alive at the moment they are actively engaged by practitioners.

Tradition is never one single entity, but a manifestation of resonances between individual practitioners and a historical record of ideas and material objects. When studio work is pursued both in dialogue and according to individual volitions and affinities, the scope of tradition widens and deepens through sharing interests and enthusiasms associated with one's practice. In the sense of Kuhn's (1970) conception of historiography, tradition is influenced by contemporary perspectives, selective representations derived from either oral tradition and lineage of craft practice, or from a record of artifacts (media documentation or writing).

In the following chapter I will discuss conditions influencing the intergenerational transmission of creative activities, bound on one hand by the desire to exercise individual agency and on the other by the obligation to situate such agency within the context of an evolving cultural heritage.

5.2. Anthropocentric Self-Reference

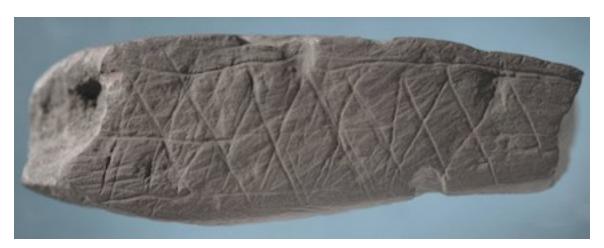


Figure 5.1. Artifact from Blombos Cave, South Africa, c. 70-100,000 BP Source: (Henshilwood et al., 2002)

Among the oldest (potentially) arts-related objects currently known are a series of flat stones incised with diagonal patterns discovered in the Blombos caves in South Africa, estimated to date from somewhere between 70-100,000 Before Present (Henshilwood et al., 2018). They are found throughout Africa, leading to the hypothesis that they had an important but unknown role in archaic human society. That the pattern

may be abstract and decorative is not a trivial matter—such symbolic patterning—independent of reference to the human body or other recognizable forms—is recognized by contemporary anthropologists as a distinct point of cognitive development in our species (Morriss-Kay, 2010). It is unknown what first inspired human beings to create these patterned objects.

The human population at the time these patterned objects were created was miniscule compared to today, and our relationship to the land, elements, and animals much more intimate. There may have been little or no contact between human communities from other parts of the continent. The tenuous nature of our existence as a species is made even more apparent when we learn that human populations came close to extinction levels—as few as five thousand to thirty thousand individuals worldwide—in the Toba Event around 70,000 BCE (Mohorčich, 2017). We are also known to have coexisted as a species with close hominid cousins on the evolutionary tree for at least 150,000 years, with whom we likely competed for resources and who similarly engaged in toolmaking, ritual activity, and even art-like practices similar to our own (Morris-Kay, 2010, p. 159). Such context for the development of our species affords a certain perspective on our relationship to activities and mental conceptions associated with artistic production. We were neither absolutely unique as a species, nor necessarily have always been the apex species in our environment. Consciousness of an uncertain shared existence among diverse beings may in the distant past have mitigated our current propensity to view the world in predominantly anthropocentric terms.

It is instructive to reflect on an era when our DNA was nearly identical to contemporary humans, yet our cosmos was to a greater degree more tangibly defined by non-human factors. Over tens of thousands of years, art has grown increasingly self-referential. Compositions dominated by depictions of animals eventually included detailed representations of flora and eventually the local terrain. There have always been representations of the human form, sometimes emphasizing symbolic features (such as those associated with fertility), but eventually the human form came to dominate, and natural elements sometimes became personified as human form. Art in the distant past seemed to unself-consciously take the human perspective for granted and look out into the world, then slowly translated everything that was encountered into human features and concerns. It is difficult for contemporary humans to approximate the more open-ended vision of artistic production that our ancient ancestors may have taken

for granted. We live predominantly in a human-defined world, saturated from earliest childhood not in the mystery of either a flourishing, unbounded imagination, or dimensions of experience beyond human manufacture, but in constant comparison to both historical and contemporary examples of creative process and product associated with other human beings. For artists, this translates into an understanding of art as a predominantly self-referential affair—how one's work might be compared to other contemporaneous artworks or to antecedent forms of expression. Although this is unavoidable, I propose that it is also important for artists to remain in touch with art as something innate to our being and immediately accessible through direct experience yet decoupled from an exclusive concern with human culture. The possibilities of art can be re-inscribed at any point.

Art did not have to end up being what it has come to denote in human culture, nor does it have an inevitable predestined form determined by its history up until present day. The seeds of its future possibilities are contained in the orientations and activities of each practitioner and are thus variable in infinite ways. The same can be said with regard to the history and future possibilities of educational practices—each practitioner has a measure of agency in shaping future potentials.

5.3. Being-Time

Distinctions between traditional and progressive, historical, and contemporary may carry a different resonance in the midst of practice than they might from perspectives outside of creative production. I became vividly aware of this the first time I stood in front of a five-hundred-year-old oil painting by an artist I admired. Although our worlds would no doubt have been completely different, the visible brush strokes and my physical proximity to the canvas reminded me that there was little difference between what the artist had been doing and what I was currently doing when in front of the painting on my easel—the tools, materials, and processes were nearly identical. Although there are indisputable patterns of linear development from the standpoint of recorded technological and cultural history, a different kind of relationship to time is discernible from within the artmaking process. In the previous chapter we encountered Reinhardt's (1999) notion of there being "no ancient or modern, no past or future in art" because "a work of art is always present" (p. 206). There are close parallels between this characterization of creative process/active perception and Dōgen's notion of *uji* or

"being-time" (in Waddell & Abe, 2002, pp. 47-58). In the case of both artist and contemplative practitioner, "history" originates within the practitioner as living presence as much as it is an observable series of transitions or record independent of the practitioner. Not in the sense that history is simply a projection of subjectivities, but in the sense that what is relevant to practice emerges and is modulated through activity itself. The dynamic response to affinities (past and present) is what shapes the scope and depth of practice in its own unique form, as opposed to abstracted notions of a "tradition" or "history" exerting a uniform, one-way influence, or representing a variably defined aggregate to which we contribute. Uji is closely associated with Dōgen's notion of "practice-realization," or the simultaneity of aims and their actualization as embodied presence and activity (Tanahashi & Levitt 2013, p. 12). For Dōgen, time cannot be dissociated from its physical manifestation as everyday reality; for human beings, time is not an abstract quantity existing outside embodied perception and activity.

Although Dogen's ideas may seem unusual, they remind us how much we rely on conventions that have become accepted as common-sense due of their ubiquity. Uchiyama (2018), in reference to uji, comments that although we think we know what time is, our understanding is limited by innate perceptual bias: "no matter how much we sit around thinking this or that, since we can't see straight in the first place, there is no reason to expect to hit the target regarding what the true form of things is... the only thing that is unmistakable is that the questioning exists in each moment of time." (p. 210). However, Dōgen's description of time as activity or presence is not so peculiar. Time could more simply be defined as change—transitions from one state to another, which—at least in conventional terms—implies different states of being, if only in terms of coordinates along a spectrum or axis of some kind (location, intensity, volume, etc.). This presumes both activity and physicality, although it is arguably more complicated in human affairs, because change can also be observed in things that might be embodied but are not necessarily experienced as physical, such as thoughts, emotional states, and ideas. Nishijima & Cross (2006), however, take the position that Dogen specifically equates uji with activity rather than cognition:

Master Dōgen recognized the existence of something which is different from thought; that is, reality in action. Action is completely different from intellectual thought and completely different from the perception of our senses. So Master Dōgen's method of thinking is based on action, and because of that, it has some unique characteristics.

... Master Dōgen recognized that in action, the only time that really exists is the moment of the present, and the only place that really exists is this place. So the present moment and this place—the here and now—are very important concepts in Master Dōgen's philosophy of action. (p. *ix*)

A close parallel in western thought is perhaps Baruch Spinoza's (1992) notion of *natura naturans* or "nature naturing," which describes a universe of continual self-caused activity, in contrast to *natura naturata* ("nature natured"), a universe composed of objects that have been acted upon (pp. 51-52). Spinoza (1992) describes natura naturans as "that which is in itself and is conceived through itself" (p. 52), a distinction that implies a universal state of generative flourishing, a constant evolutionary "present" akin to a standing wave. Nishijima & Cross (2007) reiterate that Dōgen's notion of time is exclusively contained within the immediacy of activities in the present moment:

U means "existence" and *ji* means "time," so *uji* means "existent time," or "existence-time." ... Specifically, time is always related with existence and existence is always related with momentary time. So in reality, the past and the future are not existent time; the present moment is the only existent time— the point at which existence and time come together. Also, time is always related with action here and now. Action can only be realized in time, and time can only be realized in action. (p. 143)

Our experience of time is more than any mechanical means of measurement. Depending on whether we are resisting or are absorbed in an activity, time can slow down or pass by quickly, become a blur of perceptual static or rich in details that radiate significance. When we fall in love, a few hours can become an eternity that we reflect upon for years to come. A common feature of artistic and contemplative activities that relates to uji is observation, which is rooted in the immediacy of perceptual reflection. Observation can extend to practical aspects of artistic process as much as the maintenance of reflective consciousness that is foundational to contemplative practice. In life drawing, as the artist slows down in observing an object or scene they aim to describe, the rhythm of breathing evens out and stabilizes, discursive thought abates, and subtle patterns of relations are revealed. The artmaking process can be compared to daydreaming in a certain way—absorbing and reflecting in the midst of activity. Contemplative activity is very similar—in fact, we can enter a similar state in the midst of any daily activity, without needing to name it either art or contemplation. Falkenberg (2014) has further specified observation as awareness, attention, and noticing (p. 27-29), all three of which are relevant to behaviour and activity in artistic, contemplative, and educational process, particularly in the distinction between "directed" and "captured"

attention (p. 28). Attentive consciousness, rather than the linear measurement of time, becomes central to embodied experience.

In the distant past, there may only have been more general timekeeping—times of day rather than specific hours and minutes. The prioritization of attentive consciousness over linear measurement may be necessary in order for this less quantifiable experience of *embodied* time to live and breathe. We have obviously lost such expansiveness not only in artistic but in educational practices, where time is increasingly measured in intervals between professional activities, assignments, prescribed hours of studio time per semester. Nevertheless, timelessness—*being*-time—remains at the heart of reflection, perception, and the continual renewal of attentive curiosity.

5.4. Historiography

Since 2004, I have been collecting quotes in my studio notebooks in which I insert the word "art" in passages not explicitly written about art. In the following example from 2018, I substituted "art" for the word "science" in a passage from Arne Naess's (1972) *The Pluralist and Possibilist Aspects of the Scientific Enterprise*:

Naess's account of Kuhn's concept of historiography: "Roughly speaking, Kuhn suggests that a mature [art] develops normally within a tradition through acceptance of a certain way of 'doing [art]'. The activity is only in part characterized by acceptance of a definite set of explicit theories, assumptions, and postulates as true and correct. Implicitly held views, presuppositions (à la Collingwood) contribute essentially to the tradition. Only a revolution, incited by persistent anomalies, makes [an artistic] community relinquish its loyalty to its tradition and take up a new way of 'doing [art]'. (p. 111)

It is not incidental that Kuhn's 1970 postscript to The Structure of Scientific Revolutions was included in Harrison and Grant's (1990) Art in Theory (pp. 936-940), a substantial collection of texts that helped form my own understanding of art and cultural theory. Kuhn noted that although his research was specific to the history of science, this conceptual framework for understanding the interactions between history and research activities is observable and "widely applicable" across disciplines as diverse as literature, music, art, and politics (in Harrison & Wood, 1990, p.940). Rosenberg (2011) reiterates

Kuhn's view that science and art have much in common as speculative, open-ended domains of inquiry:

Kuhn's shocking conclusions suggest that science is as creative an undertaking as painting or music, and they encouraged many to view science as no more objectively progressive, correct, approximating to some truth about the world, than these other human activities. On this view, the history of science is the history of change, but not progress. (Rosenberg, 2011, p. 220)

Naess (1972) characterized Kuhn's historiography in ways that are particularly compelling with respect to tradition and creative process (p. 111-28). In contrast to the simplified narratives of "textbook history," the messy actuality of experimental inquiry might better be characterized as periods of linear development that are suddenly interrupted by a comprehensive transformation of aims, methods, a periodic coalescence of insights within select contexts, similar to a "gestalt switch" or the effect of a "Rubin's vase" optical illusion (Rosenberg, 2011, p. 224). The tension leading toward such radical transformation within a discipline has its source in cumulative, unresolved anomalies within the dominant research paradigm. According to Naess (1972), this less unified, more random process is influenced not only by culturally inscribed conceptual frameworks, but by the existence and availability of a record of documented research activities, some of which is inevitably neglected, lost, or inaccessible to either researcher or research community (pp. 111-12). Besides there being no meta-cultural standard of conceiving "progress" in a given field, there is no means of possessing, transmitting, or even surveying a "complete" range of information in any discipline. Moreover, what information is considered relevant or worthy of investigation is also modulated by factors outside the concerns of the discipline, such as political and socioeconomic contingencies. The major contributions of each generation of a research community, despite their potential importance and influence, are in the end the result of one path taken at the expense of alternatives. These alternatives, if available as part of a record of documented activities, might be retrospectively valued and revived in future generations. For Naess, the significance of Kuhn's historiography is that it encourages the researcher to entertain the possibility of a multiplicity of valid forms of inquiry:

Science is largely, but of course not consistently, moving in the direction of a unity of outlook, a 'scientifically' sanctioned conformism.

... Those who, for lack of philosophical education, see a lot of 'hard facts' in text books, and mistake increase of area of agreement with increase in truth content, cannot honestly combat the ensuing conformism, any more than can the intensively, personally engaged researcher who is 'in love' with a definite methodology or theory. Radical pluralism of research programmes is a powerful liberating force. (1972, p. 128)

When we work within consciously formulated "traditions," we are framing and expressing ideas defined by what Naess (1972) characterizes as the "implicit assumptions and non-verbalized practice" of those traditions (p. 111). These traditions are not the only possible outcome of inquiry within a discipline but are rather the outcomes that for one reason or another were most significant within a given community's scope of interests. Because we are never outside these implicit or explicit frameworks (either within a discipline, as an individual, or delineated by a wider set of cultural assumptions), "objectivity" is elusive—it is difficult to perceive such bias and thus escape an ecology of normative assumptions underlying our experience from within a domain of inquiry.

Education is but one part of the mechanics of cultural reproduction in art. It is not the sole or even primary determinant of what persists, but as a domain of training and accreditation nevertheless influences aspects of culture that are promoted and reproduced. Despite valid challenges to Kuhn's theories (Rosenberg, 2011, p. 231-34), it is indisputable that there is not one comprehensive "history" or "tradition" upon which artists of the current generation might draw, but rather a vast record as a source of contemporary, individual re-interpretation. This is perhaps one way of understanding Willem de Kooning's puzzling statement "The past does not influence me, I influence it" (in Cage, 2012, p. 67). Harold Rosenberg (1983), an influential American critic and close associate of de Kooning, put it this way:

An art mode, new or old, is for the creative mind essentially a point of beginning. Content is brought into being by the activity through which the artist translates the movement into himself. In such an appropriation, there is no difference between an ongoing movement and one that is finished... That art history has a schedule of continuous advances en masse is a fantasy of the historian. The shared syntax of art movements is constantly replaced by the sensibility and practice of individuals. The avant-garde art of yesterday is the only modern equivalent of an aesthetic tradition. The fading of the ideas of a movement does not mean that it can no longer be a stimulus to creation. Compared to the activities to which they give rise, ideas in art have a brief life. In the last analysis, the vitality of art in our time depends on works produced by movements after they have died. (p. 230)

Individual practitioners, taken as a collective, are the very means by which the culture of practice is conceived and transformed.

5.5. Axe-Handles

One of the more influential texts in my teaching practice is the poem "Axe Handles" by Gary Snyder (1983). The poem centers on a quote from Jin Dynasty writer Lu Ji (261-303): "When making an axe handle, the pattern is not far off." In the brief narrative of the poem, this quote is brought to mind at the moment Snyder suggests to his son how they might go about fabricating a new handle for a discarded axe head. This activity triggers the author's memories of how this quote was transmitted through a combination of sources, from Ezra Pound's rendering of classical literature to Snyder's own Chinese literature teacher, and finally the author's realization of its deeper message as Snyder finds himself engaged in the literal activity Lu Ji describes. It is in the immediate experience of wondering how to go about making an axe handle and wondering how to teach his son how to make an axe handle that the author becomes vividly aware of the metaphorical and practical dimensions of the activity: to make an axe handle, one can look at the handle of the axe being used as a model for the new handle. This can be interpreted in different ways: in teaching, we ourselves, as well as the tools and craft tradition, are both "model" and "tool" shaping the "material," which can be construed as both the individual student and the tradition in general. We have also been shaped by the "axe" (teacher/tradition) of the previous generation, who themselves taught according to how they had been shaped. The implication (perhaps warning?) is the necessity of self-reflection in this process of reproducing knowledge, behaviour, and tradition. Without reflection, an inadequate design can be reproduced just as easily as a desirable or beneficial one. Importantly, both student and instructor have the power to preserve, modulate or interrupt elements within this intergenerational transmission.

The Lu Ji quote is taken from his c. 300 CE *Wen Fu*, or "The Poetic Exposition on Literature." This text is sometimes referred to as an "essay," although (interestingly) the literary form *fu* translates to something closer to the format of Snyder's own poem. According to Owen (1992) *fu* "is not adapted to linear exposition; rather, in seeking to say all there is to say about a topic, it can cheerfully allow contradictory impulses to exist together in close proximity" (p 75). The full quote reveals that Lu Ji is not only thinking

about tradition, but reflecting on the intersection of activity and the linguistic representation of activity:

"When it comes to taking an ax in hand to chop an ax-handle, the model is not far from you; however, it is hard indeed for language (*tz 'u*) to follow the movements (*pien*, "mutations") of the hand. What can be put into words is all here." (in Owen, 1992, pp. 85-86)

Owen (1992) points out that this passage illuminates the divide between "two different kinds of acts—those which have clear models at hand and those which are based on intuitive knowledge" (p. 86), conveying the difficulty of finding the appropriate means of tracing and communicating something from within a flow of activity. Owen further describes how Lu Ji here alludes to a passage from Chuang-tzu:

The wheelwright argues for the essential untransmissibility of the Way of the Sages on the model of the prereflective and intuitive mastery of his own craft: "you achieve it in your hands, and those respond to the mind. I can't put it into words, but there is some fixed principle there. I can't teach it to my son, and my son can't get instruction in it from me."

... when one has an ax-handle in hand, one can readily chop another ax-handle; but that process cannot be described in language (doing may be more difficult than knowing, but describing the doing is virtually impossible). In this case the stress is not on the difference between model and execution, but between the intuitive execution of an act and a description of that execution. (p. 86)

Lu Ji's example of the axe-handle is ambiguous. Owen (1992) presents several possibilities of interpretation, the second of which—although considered by the author unlikely—perhaps being most compatible with a view of art instruction (or instruction in contemplative practices) as something that can only be taught up to a point by means of emulating explicit examples:

A second possibility, remote but attractive, is that Lu Chi is obliquely referring to his own work here, whose literary qualities are an "ax-handle in the hand" and offer a more immediate and intuitive model for his readers than a less literary attempt to describe the writing process. (p. 87)

The inference is that students, although reliant on teachers for guidance and support, must make their own way, or perhaps can make their own way in tandem with their teachers making their own way. The inference is also that art is the best means of teaching and learning about art, not just talking about art, or demonstrating the artmaking process, but by being an artist, being surrounded by art and other artists, and

by making art. This view mirrors Uchiyama's (2004) summation of Dōgen's philosophy, that zazen is the "truest and most venerable teacher" (p. 149). In an educational context, the artist and the art are both "pattern" or "model" regardless of whether the artist happens to be educator or student. As Lu Ji's use of fu suggests, artists are simultaneously many things—philosophers, poets, technicians, designers, and craftspeople. How can all such possibilities be modelled except through the example of individual sensibilities? The painter Mary Abbott recalled a letter in which Willem de Kooning described an artist as a "philosopher of a particular kind, self-made, one whose ideas emerged not only from books but from actual living of life. Art changed as the artist changed, as he wondered and thought about and responded to provocative events around him. Art was never an end. Art was never finished" (in Stevens & Swan 2002, pp. 277-78).

Lu Ji's metaphor of the axe-handle extends to craft as a collective enterprise. We are each in turn the "material" and the "tool" embodying the discipline itself. This describes not only the acts of teaching and learning, but the intergenerationally defined function, aims, and process of artmaking, none of which are strictly reproductive. Generative potential is latent in any cycle of reproduction, implying a responsibility to attend to and critically assess the values and aims contained in one's practice as much as those inherent in the supporting contexts (institutional, cultural, etc.) in which one's practice unfolds. Each practitioner shapes the substance of self, discipline, and institutional framework. The "model" may be close at hand, but what are its qualities?

5.6. Emulation

Do we best learn by emulating skilled practitioners? "Expertise" or confidence in one's abilities might at least be equally developed through familiarity with the variables and nuances of practice, a condition which is only tangentially dependent on the example of a teacher. In traditional apprenticeships in Japan, students were expected to absorb knowledge by watching the master out of the corner of their eye, but never directly observing or asking questions (Moor, 2022, p. 28). Yet if the apprentice can learn something by observing the instructor in this way, is it not possible to also learn something by observing practitioners other than the instructor (professional or amateur) or simply by paying close attention to what occurs in practice? Is learning best guided by the supposed objective judgment of instructors? An alternative view may be that there

are potentially many examples around us if we are in a receptive mindset, including the possibility, as Gary Snyder noted, of learning about our own practice by observing skilled practitioners in an unrelated field (in MacLean & Snyder, 1980, pp. 60-61). The instructor's work may be recalibrated as a responsibility to create a supportive framework and environment for the shared pursuit of individual inquiry, where knowledge and models of knowledge acquisition may be derived from any number of sources and in any number of manners. The instructor might model flexible perspective, active curiosity, and integrity in the pursuit of one's interests, but modelling or emulation may not be appropriate as the defining condition of the educational process. American artist Robert Irwin describes a student's inclination to emulate an instructor as an understandable but problematic feature of studio arts education, framing this dilemma as a serious ethical consideration:

It's very difficult to avoid, the being lost in the beginning and the school set up to emphasize short-term performance. So [students] tend to imitate what you do as a way of associating with what you say. But what you're trying to do is develop their sensitivities and not your own... I would think that the most immoral thing one can do is have ambitions for someone else's mind. That's the crux of the challenge and the responsibility of having the opportunity to deal with young people at such a crucial time in their formation.

... The problem with teaching full-time... is that there comes a moment when there is a shift from why to how. I mean, people want you to be their guru, and that's the last thing you can do for them, that's the worst thing. (in Weschler & Irwin, 2008, pp. 125-26)

Irwin noted that the influence of a teacher with a strong personality is particularly harmful because it can impede the ability of students to discover their own interests and capacities, many of which may still be latent or developing, in effect "[taking] away their license to really do something on their own" (p. 125). Snyder (1991), however, sees the premise of a teacher decisively influencing students as more illusory, commenting that "No one—guru or roshi or priest—can program for long what a person might think or feel in private reflection" (p. 54). I propose that the acknowledgement of such lack of control and a general orientation toward co-agency in inquiry better serves the realization of a student's self-conceived scope of inquiry—the details of relevant technical proficiencies, slightly different for each student, can be worked out as part of the ongoing program of study. There will be no end to the requirement to learn new technical proficiencies throughout a career devoted to creative production. What matters most is encouraging

students toward a resilient self-confidence in the pursuit of their interests. Conformity to the judgment of any instructor, no matter how astute according to their specialization, sets a limitation and dependency that must sooner or later be put aside.

5.7. Agency in Defining and Reshaping Tradition

Jacques Rancèire (2009) describes how there is no clear demarcation line between an ostensibly "active" artist and an ostensibly "passive" audience, advancing the notion that spectatorship is itself a dynamic, participatory act (p. 13). Rancière point out that all artists were once (and never stop being) "spectators," inspired by the spirit or power of a sculpture, painting, poem, or musical composition artworks to want to create something similar. Not just to copy, but to make something one's own, to create a vehicle for expression. Spectatorship is also folded into the creative process with regard to the artist's own work. In becoming audience for one's own work, the artist might reflect on exactly how or why things turn out a certain way or speculate how an element of the creative process might be altered to achieve a particular aim. In both cases, this reflective process—which can be anywhere on a spectrum from casual awareness to a more critically attentive focus—leads to consideration of the "mechanics" of an artwork, whether it is a technical understanding of tools and materials or some aspect of the perceptual or embodied experience of the artwork. Artmaking alternates between creative activity and reflective assessment of both process and product, so that consideration of plausible expectations and interpretations necessarily become folded into the process. With experience and maturity, this speculative analysis becomes similar whether the artwork in question happens to be the artist's own or someone else's, contemporary or from thousands of years ago.

One of the more challenging tasks in studio education is to draw students into a recognition of their agency in recalibrating tradition as the directly experienced dynamics of creation, communication, and interpretation. In the following section I will outline an assignment that encapsulates my attempt to draw students into the full range of considerations addressing their agency in modulating traditions within a discipline. Although this example is an assignment designed for a third-year drawing course (Drawing/Collage) at Emily Carr university in Fall 2013, I have adapted it in other contexts, such as intermediate painting and studio courses at SFU's School for the Contemporary Arts.

Assignment 1

Make a series of drawings that do not utilize any materials usually associated with drawing, nor have any relationship to the expectations of drawing according to any particular cultural inheritance. But no matter what you do, the result must be drawing. Is it possible to fulfill these requirements? The goal is not to subvert or negate tradition but use this approach as a means of revealing individual or culturally conditioned assumptions of the content, appearance, and purpose of drawing.

You can address drawing in terms of methodology, presentation, materials, content, or effect. Embodied context (physical presence and place) is as important as tools, process, and materials.

The root questions for this assignment are: What exactly is drawing? What can drawing potentially become? These questions can be posed and answered many times from varying perspectives. An artist's work is itself the repeated (sometimes contradictory) answering of these kinds of questions.

This assignment is not about rejecting the broad history and traditions of drawing, but rather defining for yourself what is most vital and important about the various characteristics that we associate with drawing.

To fulfill the requirements of the assignment, students first have to articulate their understanding of a discipline's traditional form. Given that students may choose any number of sources and arrive at different conceptualizations of traditional means of expression, tradition is eventually mapped according to how it is defined by members within a particular learning community, rather than being asserted as a predetermined range of materials and practices according to any one conception of tradition or set of traditions.

The second requirement of the assignment is to attempt to avoid reproducing any of the materials, processes, or conceptualizations identified as "traditional," which necessitates further consideration of the presumed traditional aims of a discipline. Is the purpose of painting or drawing, for example, to accurately (photographically or perceptually) reproduce visual phenomena? Following the thread of these presumptions tends to lead each practitioner in slightly different directions, which become more uniquely differentiated the further one pursues their line of inquiry. This approach can afford the student a great deal of latitude in how their insights might find material expression, as well as remind an instructor of the biases and presumptions potentially informing course design. the assignment de-centers the underlying assumptions of knowledge acquisition and transmission, somewhat levelling the hierarchical relationship

between instructor and student: each participant is encouraged to become thoroughgoing in their own conception of practice.

5.7.1. Two Examples

How did students respond to the above exercise?

One third-year student realized that time, not just *line*, is heavily implicated in drawing—a point that extends temporally as well as spatially. As they put it, drawing is both "field" and "connecting transitions" between points within a field. The "field" could be construed as an *X/Y* axis or as a "field of vision." The student outlined various associations with such an observation, such as walking and movement, or the movement of eyes tracing a series of inferred visual relations. How, she wondered, can these observations be made available to others in some form? The result was a video where the camera deliberately drifted and stopped at different points, autofocusing on objects at varying distances. Although a video, the work was extrapolated from a prolonged meditation on the experience of making and viewing drawings, concentrating specifically on the constant, half-conscious mobility and selectivity we experience in the act of vision.

In a second example, a fourth-year student, noticing the messy by-products of some drawing materials, transformed this observation into a meditation on the arbitrary separation between two-dimensional and three-dimensional work. In one instance, the student "recycled" all the debris from erasers from colleagues in the classroom, eventually presenting them as a small mound under a sharply directed spotlight on the gallery space floor. In a second instance, the student swept up and quantities of graphite or charcoal powder from the drawing studios and relocated them in different areas of the school, causing them to be tracked through public areas. In photographic documentation, this work took on the appearance of "messy" gestural two-dimensional work, rendering the notion of gesture as individual self-expression into a randomized, inadvertently collective format. It was debated in critiques whether this work was essentially performative or photographic, two-dimensional or three-dimensional, or representative of individual aims or collective randomized process.

Such an expansive approach holds potential for iterative explorations of form and purpose not bounded by adherence to an idea of what an artwork *should* be according to historical precedent or cultural expectations contained within a discipline. In such an exercise, students model possibilities of practice by summoning attentive consciousness to their immediate world of experience and simply asking themselves the question of what is contained in the practice and what might conceivably constitute the practice. When we want to know what an artwork within a certain boundary of practice might be, we can profitably look at history, the examples of our colleagues, or through our direct experience and critical reflection of the processes, materials and underlying aims associated with the craft tradition. This process can act as a through-line between academic and post-academic inquiry, between the evolution of self and the generative re-inscription of the disciplinary boundaries.

Chapter 6.

Reflection, Debriefing, and Measurement

6.1. Introduction

In the following chapter, I will explore the interrelated themes of reflection, social organizational principles, and evaluation process as they relate to formal concerns of course design and implementation in arts education. Throughout, I will reference my experience in designing and teaching Building on Reflective Practice, Designs for Learning: Art, and Introduction to Educational Philosophy through SFU's Faculty of Education.

In Part 1, I will discuss how reflective consciousness, in Falkenberg's (2014) sense of "attention, awareness, and noticing" forms the basis of creative inquiry in both art and educational practices. In support of this view, I will explore Ralph Waldo Emerson's curious notion of intellect, in which he proposes "reflection" and "immersion" as modalities necessary for intuitive and analytical processes. I will conclude with an exploration of how "debriefing," a variety of approaches derived from theories of social organization and psychology, provide models of cooperative assessment and planning that best align with the combined dialogical and self-initiated processes of arts-related activities.

In Part 2, I will describe how George Birkhoff's 1933 attempt to create a formula for "aesthetic measure" exemplifies the difficulty of identifying measurable aspects of arts production that can be standardized as universal assessment criteria. I propose that universal assessment criteria in visual arts are insupportable except as a convenient (yet arbitrary) guideline based on individual, procedural, or socio-cultural justifications. In contrast, I will suggest how elements of assessment can be integrated into the organic processes unique to the flourishing of individual and shared inquiry (on the part of educators and students alike). I seek to advance the notion that individual inquiry, course design, and the use of evaluation primarily as a means of identifying and planning areas of future exploration, is best conceived as a unified dialogical process that can take on many forms.

6.2. Part 1: Reflection and Debriefing

6.2.1. Reflection

The term "reflection" has become a common feature of educational theory and practice since the late nineteen seventies and early nineteen eighties (Kolb, 1984; Chang, 2019; Schön, 1983; Veine et al., 2020). Although there may be a temptation to shape an understanding of reflection predominantly in reference to these discussions, human beings have a pronounced tendency toward reflective curiosity, even when not leveraged for any specific goal or as a basis of a theoretical construct in any particular domain of inquiry. "Reflection," in the way I am thinking of it, simply describes attentive consciousness and open-ended (potentially non-directed) consideration or speculation, a condition applicable not only to everyday experience, but to any number of activities or areas of formal or informal inquiry. "Contemplation," a close synonym, similarly conveys the possibility of reflection as open consciousness rather than a predominantly linguistic or cognitive activity. Reflection can be inner or outer directed, denoting the pursuit of a clearly defined objective, the cultivation of observational capacities, or deepened sensitization to what transpires in our experiences. Although it suggests thought or analysis, it is not limited to a programmatic organization of ideas, but potentially incorporates a full range of feeling, thought, and speculation. It is also possible to reflect on the nature of our reflective consciousness. For example, actual dialogue, as well as internal dialogue, trace the interaction between our conception of events and what they might be independent of our desires and judgments.

Reflection, in relation to artistic production, includes different levels and modalities of thought and feeling in response to perceptual interactions with material processes and environments. Reflection on such experience is also brought to bear on active consideration of completed artworks. Attentive consciousness is thus, as much as material or processual means of expression, a defining condition of artmaking, a recursive process of *reflecting*, *doing*, and *being*. Falkenberg (2014) connects attentive conscious with Dewey's account of experience as agential activity as well as Matura and Varela's account of the "biological roots of human understanding," both of which rely on the notion of interaction between self and environmental context of self (pp. 314-15). Reflection is thus intertwined with purposive activity and its simultaneous shaping of environment and behaviour. Falkenberg describes qualities associated with *awareness*,

attention, and noticing, which collectively indicate various orientations or modes of reflection. Of particular relevance to arts practices is Falkenberg's observation that attention can be both "directed" and "captured" (p. 317), paralleling Arnheim's (1969) speculation that teoria ("detached beholding, contemplation") has its evolutionary roots in our ancestors' observation of environments from removed vantage points, which enabled them to track changes and patterns of relationship without being caught up in the immediacy of response (p. 17). From a general field of associative consciousness that waxes and wanes as our attention moves from one thing to another, events in the environment might attract our interest and become the subject of more focused observation. "Critical analysis," in Arnheim's speculative scenario, can be thought of as reflective speculation about the potential relations between patterns we notice and events that attract our attention.

6.2.2. Emerson and "Intellect"

While doing background research for the Fall 2021 offering of Building on Reflective Practice, I discovered an unexpected correlation between the ways I have been thinking of reflective practices in art education and the work of Ralph Waldo Emerson. Although not writing specifically about arts-related practices, Emerson's speculation about the relationship between reflective and analytical modalities accurately conveys the variable qualities of mind experienced in creative activity, problem-solving, and speculative invention. In "Intellect," Emerson (1841/1981) conceives the human mind as "spontaneous in every expansion" and unpredictable in its associative response to what is encountered and in its diverse modes of operation (p. 277-79). He describes logic as "the procession of proportionate unfolding of the intuition" (p. 279), or a series of consciously constructed, defensible propositions in response to ideas that spontaneously emerge from the flow of associations and observations that comprise reflection or contemplation in its widest sense. Emerson suggests a distinction between a narrowly compartmentalized intellect and a more holistic "constructed intellect" that draws variously from diverse modes of understanding. The constructed intellect "produces thoughts, sentences, poems, plans, designs, systems. It is the generation of the mind, the marriage of thought and nature" (p. 281).

Emerson employs the biological analogy of respiration or the heart pumping blood to describe reflective consciousness as an organic interaction in which categorical

distinctions between intuitive association and rational analysis, the words of others and our own thoughts, feelings, and direct perceptual experience can become blurred (p. 279-80). Ideas and experiences may change us, yet we also modify both through the unique ways we absorb and *reflect* them back into the world. In his thinking, critical assessment of conceptual proposals or extent bodies of knowledge thus become a simultaneous act of critical *self*-reflection, in that we are always in part seeking to understand to what degree various accounts of experience either align with or challenge our own experience or perspectives. Emerson's view suggests that such assessment is not always compartmentalized as a purely cognitive process, and that there is a spontaneous transcendence of modes of experience in reflection, with associations jumping between feeling and thinking, memory and present perceptions, and what we (or others) believe to be the case.

6.2.3. Reflection and Intersubjectivity

Emerson suggests that we might look to our own experience as a microcosm of human experience in general (p. 281). However, subjectivity alone does not guarantee accurate perception, suggesting the necessity of *dialogue* as a safeguard against the potential limitations of subjective perception. Emerson notes that if the projection of subjectivities as universal "truths" is obviously problematic, so too is the presumption that insight is always somehow "out there," or to be predominantly derived from accounts of experiences other than our own. Without indulging or suppressing either extreme, we might recognize the potential for discovery equally through immersion in the works and perspectives of others and through deeper observation of and reflection on our own experience and perceptions. The organic nature of this process is not, in Emerson's estimation, something that is completely amenable to conscious analysis. As he puts it, "We are all wise. The difference between persons is not wisdom but in art" (p. 280). The "art" to which Emerson refers is closely aligned with the organic spontaneity and flourishing he associates with the natural world:

All progress is an unfolding, like the vegetable bud. You have first an instinct, an opinion, then a knowledge, as the plant has its root, bud and fruit. Trust the instinct to the end, though you can render no reason. (p. 278)

Each mind has its own method. A true man never acquires after college rules. What you have aggregated in a natural manner surprises and

delights when it is produced. For we cannot oversee each other's secret. (p. 279)

The idea of an intersubjective field of reflection is particularly appropriate in educational contexts, where digesting and comparing "expert" opinions tends to be prioritized over opportunities to cultivate our own ways of entering a discussion. We occasionally discover that what we mistook to be someone else's ideas are in fact our own unique insight or interpretation. Emerson's conception of intellect as a kind of uninscribed, reflective expanse allows breathing room for such interrelationships to emerge of their own accord.

6.2.4. Immersion

It is perhaps Emerson's (1841/1981) recognition of the importance of *immersion* that has the most direct bearing on the generative potential of participatory activity. He describes *immersion* as a passive means of generating a field of reflective associations (pp. 280-81), in that the incidentals associated with our most intensive or prolonged activities tend to shape our consciousness and provide reference points for both focused and desultory reflection. These associations and conditions may explicitly influence our train of thought or the quality of reflection but are not always clearly delineated. It is from this ground of related phenomena that we may perceive a vague yet enduring notion or pattern (a tantalizing suggestion of relations or glimmer of insight) that can only be fully articulated as a defensible proposition after prolonged consideration. The more time we spend doing or thinking about something, the more incidental yet potentially meaningful information that can be incorporated in such associative rumination.

Immersion in activity may serve as a counterpoint to the notion of education as something like an imposed set of standardized technical procedures. Studio arts education is especially dependent on immersion in participatory activity as a means of establishing a direct relationship to the demands and immanent possibilities of a discipline. Studio education is to a large degree dependent on educators creating general conditions for immersion, such as access to physical studio space, material and technical resources, and possibilities for meaningful social interaction, as much as it is dependent on providing technical or processual frameworks of practice. Arguably, everything we need to know about an activity is realized through participatory immersion, including our ability to apply and evaluate theoretical conceptions of practice. This

implies a clearer distinction that might be made between "practice" as learning through compartmentalized repetition, and *practice* as attentive consciousness through immersion in activity. One is focused on specific technical capabilities, the other on directly experiencing a field of actual and potential relations.

6.2.5. Building on Reflective Practice

It was with the preceding ideas in mind that I set about designing my Fall 2021 offering of Building on Reflective Practice, a third year Faculty of Education course at Simon Fraser University. As I outlined in section 1.4.2 of Chapter 1, my approach to this course was based on resisting canonical definitions of "reflection" or "reflective practices," instead proceeding from student definitions as a more "historiographic" understanding of the ways this term is used in various disciplines. My intent was to present reflection as a process that can potentially incorporate varying scales, perspectives, and modes, from consciousness of subjective, interior experience to a wider consciousness of context in which differing individual perspectives are embedded. This would hopefully invest dialogue and critical discussion with the same speculative generosity of private reflection, where ideas and associations might be aired more than simply debated as well-defined conceptual propositions. Emerson's metaphor of respiration—taking things in and reflecting them back into a field of potential associations—was particularly helpful, in that it describes a vital interaction between perceived interior and exterior phenomena, where something is "filtered" or modulated in the process.

In *Building on Reflective Practice*, this approach took on several forms, including an exercise in re-evaluating David A. Kolb's (1984) Experiential Learning Cycle diagram, to projected, real-time Ether Pad discussions regarding the structure and content of the course. These exercises were designed with student agency in mind—it was important to me to convey how our own capacities for imaginative critical reflection are to some degree equal to those of the theorists we study. In the case of a close analysis of the Experiential Learning Diagram, students recognized inconsistencies and ambiguities in Kolb's research and were able to balance these observations against Kolb's account of the efficacy of his theoretical construct. However, rather than using such critique as an excuse to dismiss or invalidate Kolb's research, students were encouraged to reconstruct its principles in ways they believed would serve a more robust formulation.

The motivating question was "How can we help or improve a researcher's seeming intentions?" rather than just "Where did they go wrong?" Perhaps most significantly, I sought to transpose a similarly constructive approach to conversations between students and myself as instructor— to treat coursework as a topic of cooperative dialogical reflection. Perhaps because approaches to self-evaluation had been explored and utilized in a similar manner at intervals throughout the term, students slowly became more comfortable in openly debating the pros and cons of the course structure and providing constructive recommendations for improvement. As one student put it, "Why wait until the end of the course when it is too late to change anything and there is no opportunity for discussion?"

6.2.6. Debriefing

In *Building on Reflective Practices*, I started to explore the possibilities of "debriefing" as a formal extension of reflection as dialogical inquiry within the context of coursework. Although debriefing models are diverse (Driscoll, 1994, 2000, 2007; Borton, 1970; Schön, 1992; Johns, 1995; Brookfield, 1998; Gibbs, 1988) they generally follow an analytical process of breaking down an experience into constituent parts as a means of gaining perspective outside one's own subjectivity, for example sharing personal accounts of an event, one's response to it, and sharing ideas about possible responses in the future. Debriefing is not a performance evaluation process, but rather a dialogical process intended to promote democratic principles by allowing open discussion between diverse stakeholders.

In some instances, such as the early work of Kurt Lewin, forms of debriefing explicitly address the relationship between researchers and research subjects, allowing for an expanded critical evaluation of the conceptual aims informing research programs (Highhouse, 2002). This aspect of Lewin's "T-Group" and "action research" has inspired similar transparency in my own teaching practice. I view such "behind-the-scenes" revelation as advancing trust in students' maturity and critical faculties, and the view that students are, regardless of our respective roles within the university context, not much different from myself as fellow participants in inquiry. I conceive my task as educator as sharing what I happen to know or have experienced in the hopes that it may be of benefit to others, which extends to sharing how and why I have arrived at a certain conception of and approach to coursework. I believe that such trust in students' maturity

and intelligence not only helps contextualize the topic of a given course but conveys how the perspectives being put forward are only one possibility among many, which invites students to develop their own sense of what is important or relevant about a topic or discipline.

In *Building on Reflective Practice*, I drew inspiration from student interest in American social worker and organizational/educational theorist Mary Parker Follett, whose work (we collectively discovered) touches on many of the themes and implications of reflective practices, experiential learning, and democratic principles of organizational debriefing. As is the case with Dewey's general approach, Follet's ideas are often formulated more as conceptual or ethical dispositions than structured theory or methodology, leaving readers free to make connections and inhabit her ideas through the specificity of their own concerns. Follett's work was of particular relevance to *Building on Reflective Practice* for its emphasis on the nature of power dynamics in community and institutional contexts, a view informed by her deep concern with the notion of democratic citizenship relying on participation in dialogue. Many of Follet's ideas in "Creative Experience" (1924) anticipate later theories of reflective practice such as Schön's (1984) "reflection-in-action" and "knowing-in-action," but extend further into the kind of generative, participatory, and transformative conditions familiar to arts practitioners:

When you get into a situation it becomes what it was plus you; you are responding to the situation plus yourself, that is, to the relation between it and yourself... Life is not a movie for us; you can never watch life because you are always *in* life... (pp. 133-134)

"We can never understand the total situation without taking into account the evolving situation. And when a situation changes we have not a new variation under the old fact, but a new fact." (p. 65)

Follett (1924) made distinctions between what she called "mechanical and creating intelligence" (p. 137). In her estimation, the unpredictable nature of experience is, in its most positive light, an expression of its generative and processual potential; previous experience can only act as a guideline for what is essentially new and unfolding in the moment. Accordingly, we benefit from critical reflection and dialogue with others as a means of negotiating this endless flow and meaningfully integrating experience. For Follett, the educational and creative process is thus simultaneously an individual and

collective flourishing, softening sharp distinctions between self-interest and responsibility to a larger community.

6.2.7. Studio Critique as Debriefing

There are similarities between debriefing models and studio critique, primarily in their shared, exploratory nature and the "non-binding" aspect of proposed modulations of perspective and aims. Studio critique and debriefing models similarly incorporate varying modes of experience as potentially relevant to the re-evaluation of events and how we might respond to them in the future. Gibbs's (1988) model of reflection, for example, breaks down an event into description, feelings, evaluation, analysis, a general specific conclusion, and proposals for future action. Brookfield (1995) similarly conceives critical reflection as a series of "lenses" by which we examine an event, including our own perception, the perspective of peers or colleagues with regard to our actions, and theoretical discourse around a similar event or experience. Insight gleaned from this diversity of perspectives aids in the reconceptualization of events as it informs future activities.

I sought to outline a more explicit connection between studio critique and debriefing models in the summer 2022 offering of *Designs for Learning: Art* through Simon Fraser University's Faculty of Education. Because this course is a component of a teacher training program, I suggested that students required awareness not just of their own individual creative process in response to assignments, but of the learning process within the wider context of studio activity in general. How, for example, did the limitations and possibilities of the physical learning environment, social interactions with peers, or the psychology of student-teacher relations, influence the development of their work? How might factors they deemed problematic be productively re-imagined?

The critique format employed in *Designs for Learning: Art* was a variant of approaches I developed over the years for studio courses at both Emily Carr University and Simon Fraser University's School for the Contemporary Arts. In discussions about artworks, there can be a tendency for art objects to either be reduced to formalistic concerns, or act as pretexts for conceptualization of experience, untethering intellectual analysis from the immediacy of physical associations and embodied perceptions. It is sometimes difficult to convey the subtle differences between these kinds of experience,

except to say that art objects and their apprehension are not synonymous with the ideas or representations of experience they might give rise to but are a variable actuality in their own right. I described the critique format to students as a means of balancing perceptions tied directly to physical actualities with *interpretations* of what was perceived, a way to maximize and make available a fuller range of responses arising from the experience of the artwork. Critical reflection can happen on both a personal and interpersonal level—studio critique provides opportunities to assess our perceptions and ideas as they are reflected upon and interpreted by others.

As I related to students, the following is a very basic model of a critique format for studio work. It requires something to write with (and on) and a timer. It is an exercise by which the artist might compare their aims with how others perceive the art object on both a physical and interpretative level. The times for each section can be modified as appropriate for the level and context of the critiques, but the structure can be as relevant for foundation work as it can be for advanced studio. I tend to strictly impose a compartmentalized format for critiques earlier in the semester and then soften the protocols as students more naturally integrate the framework into discussions. The times were brief in *Designs for Learning: Art* as it was more a participatory demonstration of how the basics of critique formats work.

"Crits" (studio critiques) tend to go smoother when students organize work in advance. This is especially important if the work requires any special equipment (such as a projector, particular lighting, or installation in a particular environment). I encourage students to consider the ideal conditions in which they might like people to experience the artwork, because art objects or actions cannot be perceived independent of their environmental conditions, context being a determining factor in the apprehension of artwork. Such considerations can eventually become folded into the art-making process itself as it becomes clearer exactly what one's aims are with a given project.

In line with the tenets of contemporary arts practices, critiques are opportunities to explore the possibility of formats and conditions that are different from the more traditional notion of an artwork that hangs on the wall or sits on a plinth of a gallery. For example, artworks might be purposefully created to be experienced on social media via the phones of the critique group; an artist might decide to eschew any explanation of intent or aims or create work that is more participatory—inviting others to engage in an

activity—rather than creating an object to be passively observed or analyzed. An artwork can include a combination of all these approaches. Whatever the specific conditions one might like to arrange, it is important (in fairness to all participants) to mind the timing requirements, for example the time it takes to walk to and back from a certain location or the time it takes to watch a video of a certain length. Negotiation within the critique group may be necessary to accommodate everyone's needs. Such practical concerns are not peripheral or irrelevant to the "art experience," but can be deciding factors of an artwork's apprehension. In the cultivation of expanded awareness appropriate to artistic practice, artists cannot selectively ignore potential and actual factors of influence as irrelevant.

I structured the crit format as follows:

<u>Part One (2 min) Without talking</u>: Write as many impressions as possible describing physical aspects of the work, including its immediate environmental conditions. These observations are strictly formal, physical, or related perceptual phenomena (for example, if there is a sound component, "loud" or "quiet"). Don't stop writing until the timer goes off—force yourself to look closer, to move around object, to turn away and look back at it with fresh eyes.

Stick to the physical and material realm—immediate and tangible aspects—do not go any further than that—be a passive recording device using all your senses. Do not take anything for granted—if one is viewing a video on a laptop or a projected image—say exactly that! Continue writing until the timer goes off.

Part Two (~4 min—as long as it takes to read out all observations): Very quickly, everybody reads out their observations in quick succession—do not add any interpretive commentary.

<u>Part Three (2 min) Without talking</u>: As exhaustively as possible, write as many plausible interpretations as possible of the work's intention or meaning based only on the earlier physical observations (yours or others). These could simply be extrapolations of observed physical characteristics (for example going from simply observing the colour *red* to associations such as *red=anger/desire/violence*, etc.). This can be a series of steam of conscious associations—don't worry whether it makes sense or not. Again, keep writing until timer goes off.

<u>Part Four (~4 min—as long as it takes to read out all observations)</u>: Very quickly, everybody reads out their interpretations in quick succession.

<u>Part Four (5 min)</u>: The artist can now discuss their intentions and/or process. This can include problems that were encountered, reservations

about the result, eliciting suggestions from the group, answering specific questions, and general discussion.

My intent is that such a compartmentalized process inspires consideration of a wider range of phenomena in the artmaking process, such as the environmental, psychological, or social factors in which the artwork is situated, to the degree they have bearing on the perception or interpretation of the artwork. Artworks do not exist in a vacuum where we can selectively ignore determining relationships. This is one of the reasons the opening chapter of Rudolph Arnheim's (1969) "Visual Thinking" continues to have something to offer as an introductory text for studio Foundation students, where he explores, from a Gestalt perspective, the interdependence of sensory and environmental phenomena as a single movement of development (p. xx). Although Arnheim makes the specific argument that vision is itself a form of thought, I would extend this further to include all forms of sensory perception and purposive activity, which moves closer to Eihei Dōgen's characterization of zazen as "life activity" in general (Uchiyama, 2004, pp. 134-35).

6.3. Part 2: Measurement and Evaluation

6.3.1. Aesthetic Measure: Limitations and Potential Value

Like reflection, creative production is at the intersection of elements that are to varying degrees intuitive or amenable to rational analysis, a condition that has direct bearing on how educational practices are conceptualized in terms of course design and the evaluation of student work. American mathematician G.D. Birkhoff's (1933) attempt to define the measurable—and thus controllable and repeatable elements—of the creation and perception of art objects, offers a window into the complexity of the issue. Birkhoff's approach to the processes necessary for the construction of his theory mirrors the kinds of focused, reflective sensitivity peculiar not only to artmaking but to various forms of reflective and even contemplative activities. Birkhoff acknowledges that such close attention to factors relevant to creative process reveals not only what might be amenable to quantification, analysis, and control, but also that many important factors escape such scrutiny.

The Formula

In short, Birkhoff's (1933) formula M = f (O/C) describes aesthetic measure (M) as a function of a satisfying ratio between order (O) and complexity (C) as observed in objects of a similar class (p. 4). According to his proposal, complexity is in part determined by the degree of "effort" expended in considering an artwork, which can be conscious thought or pre-cognitive physiological and perceptual changes that occur through attentive focus:

The attentive attitude has of course its physiological correlative, which in particular ensures that the motor adjustments requisite to the act of perception are effected when required. These adjustments are usually made without the intervention of motor ideas such as accompany all voluntary motor acts, and in this sense are 'automatic.' In more physiological terms, the stimulation sets up a nerve current which, after reaching the cerebral cortex, in part reverts to the periphery as a motor nerve current along a path of extreme habituation, such as corresponds to any automatic act. (p. 5)

The premise is that aesthetic value can be established by comparing the perceived "density of order relations" evident in an artwork with the range of perceptual, psychological, or cognitive associations generated by these relations. The greater number of order relations and degree of complexity, Birkhoff reasons, the greater aesthetic value of the artwork. Birkhoff's mathematical argument is based on assigning numbers (1, 0, -1) to positive, neutral, or negative responses to various categories of assessment. The summative "relative magnitude" of assessments (comparison between objects within a class) establishes a comparative ranking of value. Despite the explicit mathematical framework, the author's approach describes a linear analytical process as much as a spontaneously iterative one, somewhere at the intersection of sensory perception, cognition, and intuition.

Reflection as Foundation of Analysis

Any system of comparative quantification requires attentive, discriminating analysis, suggesting that measurement is not the opposite of reflective consciousness, but rather is dependent on it. Birkhoff's attempted measurement of aesthetic value required a survey of variables within creative process, which closely parallels an artist's, musician's, or designer's primary concerns in creative process. His reflection on process led to the observation that the formula is especially inadequate for addressing

interpretation (p. 13). Individual and sociocultural variables make it difficult—perhaps impossible—to draw direct parallels between a graded response to artworks and ratios of complexity and order. Art, moreover, has a way of constantly shifting the goal posts. For example, seemingly "simplistic" or "rudimentary" forms of expression may reveal deeper complexities for some viewers, or seemingly complex patterns a dissatisfying complication to others. The pleasure of art is partly in the speculation that occurs in dialogue around artworks. In conversation, we sometimes are able to expand our range of perception through understanding an artwork according to another person's views. In art, it is not just the defense of opinions that matter, but the expansion of perspectives through dialogue and by the suspension of our judgments in the act of experiencing an artwork. This is perhaps the greatest benefit of critiques in studio arts, which can often have the effect of leaving participants wondering how they could have overlooked what is so obvious to another viewer.

It is notable in that Birkhoff identified how art is uniquely dependent on dialogical and associative factors that cannot be wholly controlled or defined by either the practitioner or viewer, and whose significance is synergistically created in each encounter with material phenomena (p. 9). This process, Birkhoff noted, is dependent on how satisfyingly the artwork either mirrors or resists our own reference points, values, and expectations. The longer a categorical interpretation is either frustrated or deferred, the more we seem to be compelled to find closure through definitive categorization, inspiring even more intensive scrutiny of the artwork. This is the compelling "effort" that Birkhoff identifies as the decisive indication of aesthetic value.

"Natural Order" as Basis of Aesthetic Value

It is speculated that Birkhoff's initial inspiration to pursue this line of inquiry was the work of Jay Hambidge, whose "Dynamic Symmetry" of 1923 laid out what was essentially a modified version of a Fibonacci Sequence, or the ratios governing the growth of shells, ferns, and other natural phenomena, as a basis of aesthetics and compositional methodology in the arts. The idea is not new, extending in the West from Herman von Helmholtz's nineteenth century research in optics and acoustics back to ancient Greek observations of the connection between mathematics and natural phenomena. The underlying premise is that there exists an order on a natural or cosmic scale behind what is apparent, and that we not only recognize (and appreciate)

intimations of such order as found in nature, but that these observations can be given abstract, notational expression through mathematical ratios that can then serve as a basis of further analysis of design and composition. The "Golden Section," for example, a traditional Western two-dimensional compositional technique, is based roughly on the recognition of ratios of thirds as being in some way satisfyingly balanced (Birkhoff, 1933, p. 46). Sound and music have long been recognized as being clearly related to mathematics, extending from Pythagoras discovering the mathematical basis of intervals in music, to more complex recent use such as probability and randomization features of contemporary electronic music production. Helmholtz (1863/1910), however, reverses this perspective, instead describing "natural order" or "kosmos" as "an image of the logical thought of our mind" (p. 279). This reversal of the origin of "order" is a perspective that was later amplified by Russell's (1917/2013) observation that any notion of a "universe" is to a degree a projection of anthropocentric concerns:

In the days before Copernicus, the conception of the "universe" was defensible on scientific grounds: the diurnal revolution of the heavenly bodies bound them together as all parts of one system, of which the earth was the centre. Round this apparent scientific fact, many human desires rallied: the wish to believe Man important in the scheme of things, the theoretical desire for a comprehensive understanding of the Whole, the hope that the course of nature might be guided by some sympathy with our wishes. In this way, an ethically inspired system of metaphysics grew up, whose anthropocentrism was apparently warranted by the geocentrism of astronomy. When Copernicus swept away the astronomical basis of this system of thought, it had grown so familiar, and had associated itself so intimately with men's aspirations, that it survived with scarcely diminished force—survived even Kant's "Copernican revolution," and is still now the unconscious premiss of most metaphysical systems. (p. 76)

Russell (1917/2013) further describes the scientific project as predominantly concerned with analysis over synthesis (p. 87). What he means is that order is to be found in a granular analysis of relations and processes as they correspond to actualities, rather than through more generalized conceptualizations, an outlook that can help dissociate Birkhoff's admirable survey of factors of creative process from his more general (and often indefensible) determinations of their relative value. "Dissonance," for example, need not be "looked upon as an element of order with a negative tone of feeling" (Birkhoff, 1933, p. 9), but perhaps recognized as an element of order from a universe "so disparate from ours that we who know ours have no means of perceiving that they exist" (Russell, 2013, p. 1). Although there exists an entire science of acoustic

research, exactly *why* certain intervals and ordering might generally be found pleasing no doubt has a pronounced sociocultural dimension, which is one of the reasons both Birkhoff and Hambidge's examples of "good" composition or aesthetic value can inspire amusement and scepticism in contemporary readers.

To their credit, both Birkhoff and Hambidge acknowledge limitations in the practical application of their research, with Hambidge, for his part, remarking that "it is my conviction that no set method can be prescribed for this purpose as each artist will, of necessity, find the solutions for his own problems and will work it out for himself" (1923, p. 5). It is also important to note that both Hambidge and Birkhoff based their ideas exclusively on Western perspectives on the relationship between art and nature. although, as any glance at Islamic design sensibilities conveys, the idea of sacred geometry is not limited to Western culture. An appropriate counterpoint may be the Japanese concept of wabi-sabi, or the appreciation of the organic forms we are likely to encounter in the natural world, which seem to display a diversity of systemic interrelations independent of anthropocentric conceptions of meaningful organization. Yet, being ourselves indivisible from natural phenomena, our evolving mind-body is an expression of the same kind of self-organization that we observe in the world around us. In contrast to ancient Greek notions of "order," wabi-sabi embodies the irregular and unpredictable patterns or processes underlying the natural world, or as Koren (2008) puts it, "the beauty of things imperfect, impermanent, and incomplete" (p. 7).

Diversity of Variables and Standards of Comparison

Although Birkhoff's formula challenges the notion of art as the antithesis of rational analysis, the idea is not much different from a desire to understand the inner workings of similarly complex organic phenomena, such as a psychologist or contemplative practitioner's desire to better understand the human mind, or the artist's iterative attempts to convey fleeting sensory or perceptual phenomena in drawing or painting. The dilemma of measurement in studio arts—especially in contemporary contexts—is the heterogeneity of creative production. Even within a single category such as "performance" or "painting," there may be a diversity of variables informing process and production, from individual aims to socioeconomic and cultural variables, which must be considered in any conscious framework of assessment. A further dilemma is the question of standards of comparison. Birkhoff's very formula presumes a certain ratio

between order and complexity as resulting in a *positive* aesthetic experience, but it is debatable whether prolonging "tension" in discerning such relations can serve as a standard of comparison. Why not, for example, degree of immediate gratification of a viewer's curiosity, or average number of possible interpretations of the art object? Why, for that matter, notions of symmetry as exemplified in Greek vases of a certain period, instead of the organic unpredictability valued in Japanese aesthetics? Although Birkhoff sums up a desirable aim of aesthetics as "unity in variety," he asserts a series of insupportable value judgments regarding *order*, describing ambiguity, "undue" repetition, and "unnecessary" repetition as "strongly negative" (p. 10). His second definition of aesthetic value (derived from nineteenth century Dutch writer François Hemsterhuis) is perhaps closer to the mark, "the greatest number of ideas in the shortest space of time" (p.5), conveying the importance of density of relations, depth of intention, and resonance of nuance as important factors in artistic production and its apprehension.

What is Measurable in Studio Arts?

Birkhoff's speculation continues to be significant in that what might be "measurable" in art has direct relationship to what might be considered measurable in an educational context. Some aspects of the art-making process are, indeed, amenable to measurement and technical analysis—materials are defined by physical properties and limitations regardless of how we might hope they behave; certain technical processes can be reliably predicted to have certain results. Such predictable phenomena might conceivably form the basis of evaluation criteria in technical processes—how well does a student, for example, understand and negotiate the properties of specific pigments, or demonstrate skill in any number of technical processes in working with wood and metal fabrication? These are at least arguably measurable, requiring only a comparison between the student's demonstrated skills with a series of examples set before them. On the other hand, how one conceives the basis of knowledge or skill in creative production is subject to various factors of influence. Birkhoff's formula similarly runs into trouble with its focus on comparison of objects of a similar class. One might argue that the point of art, like education, is generative flourishing, not simply replicating models or standards of practice.

6.3.2. Evaluation: What is Meaningful, Not Just Measurable?

Birkhoff's project is instructive for suggesting what is so valuable about debriefing models as a primary mode of providing context and possible directions for student work. Assessment itself, in its connotation of comparative evaluation, or to what degree a product or performance aligns with a universally applied model, is perhaps an inappropriate mode within studio arts. The practical questions then arise—how to integrate approaches less dependent on evaluation in institutional situations where such assessments (in the form of letter or numerical grading) are standard requirements. Evaluation is defined by the possibility of quantifying aspects of the artmaking process, returning to the question of what is amenable to measurement in arts practice.

In a memorable discussion in *Designs for Learning: Art*, students identified categories that might relate to learning outcomes in artistic production: Technical Proficiency / Creative Expression / Problem-solving ("lateral thinking" or "thinking outside the box") / Originality. The question arises as to how to create a rubric with explicit descriptions of grading for these categories, a problem that researchers have noted poses serious questions about how we conceive evaluation of creative process (Watson, 2014). To initiate group dialogue around this issue, I demonstrated how rubrics are created for Canvas (SFU's Online Learning system) through a series of increasing subdivisions, starting with Pass/Fail, then High Pass/Pass/Pass/Fail, High Pass/Pass/Low Pass/Fail, etc., along with numerical equivalents until the full range of letter-grades between F and A+ were created. In a second part of the discussion, groups then had to independently itemize the distinguishing characteristics between each division. When groups presented their findings, there was little agreement as to what constituted, for example, a High Pass in "Creative Expression" or "Originality." There was also the possibility of a low grade in one category cancelling out a high grade in another. For example, either ignoring or following technical instructions might result in a low grade in "technical proficiency" but a high grade in "originality" (or vice versa), depending on an instructor's disposition. Depending on the grade-spread, the numerical correlations can reach a level of absurdity, as I once discovered in a colleague's rubric for a Foundation Studio course where students were assigned a grade out of three possible points for "Dedication." I understand what the instructor hoped to convey with the inclusion of this category but can't help but think there must be better ways of facilitating an appreciation of persistence in craft experimentation than such micromanaged criteria.

If we turn toward what is meaningful in evaluation, it becomes evident that dialogue between student and instructor, and between students and their peers, plays a necessary role. Teaching and learning are intellectual activities manifested through embodied behavioural and social processes. This is not the antithesis of measurement, but its modulation within a context of relevance to a particular set of objectives, playing out within environmental and social conditions. For example, "self-expression" or maintaining the integrity of difficult-to-articulate ideas might be a primary aim, but clarity of communication—which implies skillful use of written or verbal expression —comprises subsidiary measurable concerns that either support or impede the stated objective. But how do we account for all determining factors of communication within, to use gestaltinformed terminology, "social or behavioural environment," not just what is identifiable and measurable? The problem is that most creative practices—particularly in material practices in art—have an element of negotiation between form and explicit communication of intent. What is really at issue is an educational situation that supports students' evolving sense of their most vital interests and how to explore what is most meaningful in a thoughtful and comprehensive manner, which is a slightly different project than identifying what is measurable in order to better manage variables in the learning process. As Kohn (2016) describes, this kind of self-defined growth is less likely to occur in systems where measurement (in the form of universalized, micromanaged criteria) is used as an inducement or reward. In Oakeshott's (1950/2017) estimation, post-secondary education is an opportunity to assume the responsibility of self-growth and determination of purpose, an organic process requiring time, freedom to change, freedom from constant worry about practical value and application, and a more collegial, less hierarchical relationship between instructors and students. As he puts it, "There is, indeed, no simple way of determining what composes the world of learning: no clear reason—such as usefulness—can be found to justify its parts" (p. 25). What comprises the scope, content, and aims of learning can to a degree be co-created by educators and students.

The larger question I hoped to explore in relation to the rubric exercise was the possibility of including students in the definition of grade weighting and rubric definitions by which they themselves would be evaluated in *Designs for Learning: Art*. The very identification of relevant criteria can help students focus their own about their values and interests. The problem (for me at least) is that general approaches to evaluation in art,

like Birkhoff's aesthetic measure formula, impose a number of extrinsic givens as desirable independent of the "logic" of a given body of work or intentions of the artist, and also presume numerical correlations that might be assigned to such desirable qualities. If students are involved in the very conception of aims and means of their inquiry from the beginning, my thinking is that any meaningful assessment criteria would require their input vis-à-vis those aims. All the same, the actual numbers are not as important as the process of identifying relevant categories of interest and the student's sense of the quality of their engagement in these areas of interest.

Some students felt strongly that it was the role of the instructor to determine a set of universal grading criteria, and that even in the case of self-evaluation, it was necessary for the instructor to assess a student's proposed evaluation criteria. My position was that the moment an instructor becomes arbiter of what is "acceptable," "productive," or "beneficial," the process ceases to be self-evaluation and reverts to the psychology of instructor-defined evaluation (*instructor-evaluated* self-evaluations). As an instructor, I am more interested in hearing about the scope and character of a student's interests, and how or why they believe some aspects of their work are successful or useful and others not so much, and what they might like to explore or change in the future to best facilitate growth. I will have my own opinions to share based on my accumulated experience and knowledge, but it is still only one among many possibly helpful (or irrelevant) perspectives. Such conversations are perhaps the most useful in terms of inspiring possibilities and perspectives, rather than any reward system based on predetermined, extrinsic standards.

6.3.3. Cooperative Evaluation in *Building on Reflective Practice*

In *Building on Reflective Practice*, we experimented with open dialogue around assessment, eventually coming up with a way of using the collaborative online tool Ether Pad as a way of documenting and making classroom discussions public in real time. The Ether Pad group discussions were projected as they happened, so that the course of individual group discussions could be tracked by all groups as they developed. This approach sometimes helped groups whose discussion had stagnated—a particular remark might re-ignite commentary or debate. This approach was intended as a means of gaining as many perspectives as possible regarding the possibility of self-assessment models that would be used for final evaluations. After exploring a variety of examples of

debriefing models (Driscoll, 2007; Borton, 1970, etc.), students designed their own evaluation process, which could include my own independent evaluation of their portfolios, but also (for example) descriptive self-evaluation and peer evaluation. Numerical or letter-grades were included in the process, which for some students was more an overall grade, and for others a cumulative grade based on each component of their evaluation design. Time was allocated in a following class to put their process into action, for example setting up meetings with myself or other students. There were no restrictions regarding the modes of evaluation—they could be verbal and social, written, translated into graphic or diagrammatic form, or a combination of different approaches. The caveat was that the evaluation process needed to be coherent and functional in some way, so that its documentation would make sense if the student were to revisit the assessment at a later point in time. Students were also required to articulate a few perspectives regarding the rationale for the evaluation process—for example, why one might choose to rely on something like an interview or verbal exchange in a small group rather than an assessment written by an instructor.

On the final day of the course, we employed a similar format of real-time Ether Pad group discussions with regard to a review of the semester's work. I participated in this discussion and shared ideas about what I thought could be improved upon. At this point, a friendly and open rapport had been established, so students seemed fairly comfortable in voicing dissatisfactions and criticisms, which sometimes became not so much an indictment of my own work as an educator but an opportunity for yet more spirited group discussion. For example, some students preferred that I simply took up the traditional role of having the final say in evaluating student work, but this was passionately challenged by other students as antithetical to genuine agency in reflective process. "Reflection" had, at least for some students at this point, taken on connotations of both critical analysis and the assumption of personal responsibility for directing learning. The recommendations were sometimes general and organizational in nature (for example encouraging even more group work because this particular cohort derived much enjoyment from working collaboratively), and sometimes a more pointed personal criticism of my approach, such as completely setting aside lecture components ("too complicated") and simply providing the PowerPoint PDFs before class.

6.3.4. Challenges to Cooperative Evaluation in Designs for Learning: Art

What seemed to be a "successful" experiment in responsive course design in Building on Reflective Practices took a different turn in Designs for Learning: Art, where discussions regarding rubrics and evaluation inspired debate and occasional disagreements. These reactions were similar to those I encountered in Building on Reflective Practice when presenting critiques of David A. Kolb's theory of "Learning" Styles" (Marshik & Cerbin, 2022; Kuk & Holst, 2018; Morris, 2020; Bergsteiner et al., 2010) or the Meyer's-Briggs theory of "Personality Types" (Randall et al., 2017; Stein & Swan, 2019; Barbuto, 1997). Some ideas are so much part of popular and widespread notions of educational psychology and practice that it is assumed they are above questioning, even if they have been convincingly debunked or at least have been demonstrated to be problematic (Marshik, 2015, Stein & Swan, 2019). Because we are generally inculcated in forms of education predicated on the educator's role as supposed "neutral" evaluator of progress according to predetermined standards, it can be difficult to accept the possibility of any alternatives to determining and directing student progress. Evaluation processes are perhaps the most anxiety-inducing aspect of education for students and instructors alike because they comprise a combination of factors relating to institutional protocols and anxieties around how we self-identity, social comparison, and performance. Compounding the issue are considerations of levelappropriate opportunities for self-initiated learning. Structured frameworks may be necessary in certain contexts (particularly for younger students, students new to a discipline, or where there are clear-cut technical elements involved), but in a broader sense, all learners must at some point relinquish the notion of a "parental" figure to provide the security of clear guidance and assessment of performance, and, in a sense, assume the responsibility of directing one's own learning path. Dependency is not the ultimate goal of education.

A challenge I encountered in *Designs for Learning: Art* seemed to arise from a conflict between the aims of the Professional Development Program as teacher *training*, and the notion that teachers—pre- or in-service—not only have an ethical obligation to modulate institutional norms in ways that best serve their students' needs but to engage in conversation regarding the very definitions of aims of education within their specialization. Some students felt that any form of self-evaluation or responsive course

design was in some way indicative of an educator "not doing their job," an idea implying that the primary role of an instructor is to manage (or even micro-manage) the activities of students. The closest some students could get to an acceptable form of selfevaluation was one that was vetted by the instructor, which, as I have previously noted, is arguably not self-evaluation at all. Invocation of the necessity of "scaffolding" seemed to me at some point simply the perpetuation of reliance on instructor-determined boundaries; can we not at least work together in defining what "scaffolding" may be relevant for pursuing our respective interests? Perhaps what troubled me the most about such resistance to re-imagining educational practice was what seemed to be deepseated notions that the most recent theory or scholarship, administrative convenience, or even degree of authority exerted by an instructor are the determining characteristics of acceptable educational practice. The more relaxed explorations I encountered in Building on Reflective Practice seemed to have no place in a course for soon-to-be practicing teachers. Post-course discussions expressed a preference for hard "skills" in the form of assignment packages or course design that dovetailed into provincial curricular requirements, or insider's tips on "classroom management," not an invitation to dialogical re-examination of fundamental principles of arts education. Although I empathized with students' anxiety regarding what might likely be their limited agency in how they might teach in a public school setting, my argument remains that contemporary art and contemporary arts education is literally predicated on ongoing critical reexamination of first premises, regardless of perceived "real-world" professional requirements, and that such re-examination is the means by which our creative agency as either educator or learner is ultimately manifested in institutional contexts. If teacher education is not taken as a venue for exploring such questions, when might this otherwise happen?

At least part of the problem had to do with the PDP coursework being seen predominantly through the lens of future employment in K-12 education. From this perspective, the PDP might be more straightforwardly considered technical training according to the requirements of the BC public school system. However, this was not the case for all students in the *Designs for Learning: Art*. Some looked to teach through community enrichment programs, others sought to utilize arts education in relation to therapeutic practices such as counselling psychology, yet others were exploring how they might use elements of art to teach other subjects such as math or science. In many

ways, the open-ended nature of my approach to *Designs for Learning* was both the most logical, in that it offered many interpretive avenues and the opportunity for exploration, yet also problematic, in that it frustrated any expectations of conveniently packaged recommendations.

A wider underlying issue may be that despite so much ongoing experimentation in educational theory and practice, there remains an implied disconnect between direct interactions between teachers and learners and the development and implementation of educational theory at the level of policy and administration: educational theorists do the work of developing theory; policy is developed by administrators who select and construct guidelines of practice; teachers implement these guidelines. As noted by Pinar (1978), the implication is that theory as a combined conceptual/empirical exploration of aims and possibilities of practice is separate from what transpires in teaching. However, if theory is conceived as evolving from observations of what occurs in practice, those actively teaching and learning are arguably best positioned to evaluate the efficacy of proposed aim of practice as conceptual constructs. This implies the possibility of students, teachers, and administrators equally contributing to the development of educational theory and practice. Although clearly more applicable to higher education than K-12 programs, there is no reason to preclude, for example, open discussion between educator and student and experimentation with responsive course design, or for policy guidelines to be defined by, rather than circumscribe, any demonstrated benefits of such experimentation.

I was heartened to encounter a similar theme while assisting with Dr. Heesoon Bai's (2023) reimagined version of her online *Introduction to Educational Philosophy* course. Several phrases that caught my attention while formatting a block of text helped me understand the conflict I encountered directly in *Designs for Learning: Art*:

Hence, this course is not about teaching you a teachable subject (for example, Math or English) whereby you acquire established information, knowledge, skills to teach the subject matter at hand...

- ...We want to see if what we are doing in the name of education truly supports the moral ideal of democracy and its way of life...
- ... For the above kind of philosophical learning to take place, we need to step back, far enough, from what we are conditioned and trained to do, and take a pause and reflect.

The implication is that what is required a reconceptualization of education according to the actualities of what is encountered in practice, including a collective reorientation to psychological habits that define the educational process. Russell's speculations about "universalizability" and generalization have a particular resonance in arts-related educational practice, in that universal evaluation criteria may be appropriate if comparative ranking or performance thresholds are the aim, but art (in my conception of it) is a domain where such determinations are most productively self-defined. Eschewing grading evaluation does not imply a *lack* of productive structure, but recognition of a diversity of relevant design possibilities, including the possibility of cooperative design. The reproduction of existing systems brings to mind Kennedy's (2012) reference to the "bureaucratic inertia" of institutions (p. xxiii)—the ubiquity of certain policies can justify and guarantee their perpetuation, often for no better reason than it is common practice. Exploring alternative forms of grading evaluation is sometimes characterized as an inconvenience ("more work"). But it is a matter of one's psychological orientation to the activities comprising education in general, in the same sense as Mark Twain's (1884/1953) observation that "Work consists in what a body is obliged to do, and Play consists of whatever a body is not obliged to do" (pp. 30-31). Where there is interest, there is infinite energy.

6.3.5. Taking Away the Pain: An Evaluation Intervention

An instructor's micromanagement of grading criteria can potentially be mirrored by a student's equally micromanaged critique of assigned grades, resulting in what I think of as a kind of evaluation "arms race." The higher the stakes, the greater the anxiety that one side or the other is getting an upper hand, which requires everincreased management of details in order to remain in control of the situation. I experienced this type of "arms race" in a summer 2022 offering of *Introduction to Educational Philosophy* through Simon Fraser University's Centre for Educational Excellence, involving an accomplished mature student who refused to accept a Teaching Assistant's evaluations, and was prepared to continue the debate with myself as Course Coordinator. It became clear that the detailed assignment rubric was functioning so much as a lightning rod for technical strategization that it had ceased to be productive in any educationally *meaningful* way. The student's reasons for their constant challenges were sound (maintaining a certain GPA in order to apply for a

graduate program), but the whole spirit of the coursework was undermined in the pursuit of this goal.

I decided the best course of action was to take over the evaluation process from the TA, whose evaluations I felt were completely reasonable and who had displayed exemplary patience. I then completely undercut the adversarial disputes by guaranteeing the final grade of an "A" so long as the student completed the assignments in good faith. My rationale was that it was first necessary to eliminate the student's anxiety of not knowing if they would achieve the desired grade, or as I put it, to "take away the pain" of such uncertainty. I further undercut the possibility of future grading disputes by making clear that I would certainly read and discuss their work, but I would not assign a grade. From the examples I had before me, I knew that the student was competent in the ways we come to expect in post-secondary studies. We periodically met and talked more generally about ideas and experiences around education, which, interestingly, occasionally involved discussion about our evaluation agreement and the nature and efficacy of traditional grading practices. A more productive line of communication had been opened.

At one point I asked the student if there was a point of self-development that they might like to pursue that related to the coursework, which turned out to be working on interpersonal skills in the discussion groups, such as being able to listen without always wanting to engage in debate or win an argument. I encouraged the student to focus their thinking and behaviour toward these ends and consider the philosophical implications of their interest in relation to educational theory and practice. I suggested that it was enough for us to explore this program of self-growth within the context of the course for the remainder of the semester. At first keyed up and expecting conflict, the student and I eventually enjoyed a series of relaxed and mutually informative conversations.

The above vignette exemplifies the necessary re-inscription of relational dynamics at the heart of more collaborative approaches to education. As one student put it, what is the point of reflection and dialogue without the ability to *act upon* our insights? Both reflective practice and debriefing models speak to autonomy, personal responsibility and responsibility toward one's community, self-direction, dialogue, and cooperative decision-making. These require not just trust in our own judgment and

capacities, but generosity of spirit and trust in others, including trust in the possibility of effecting *institutional* change.

6.3.6. Designs for Learning: Art (Summer 2023)

The above experiences provided inspiration for restructuring my approach to *Designs for Learning: Art* in Summer 2023, and also brought me full circle back to the practical advice my MFA program supervisor offered for the first studio seminar course I taught at NSCADU: create provisional guidelines for what I believe to be relevant and engaging for students to explore and "see what happened." If something does work out as expected, consider how things might be done differently in the future. The difference is that I recalled with vivid clarity that this applies to course design as much as to student work, and that such a responsive, self-initiated and self-defined approach is particularly relevant for a course whose purpose is to provide future arts educators with models of experiential and experimental processes across a broad range of activities.

Accordingly, I explicitly put the course on the footing of creative process emerging more from a student's interests in the offered resources than from a predetermined set of assumptions regarding course outcomes and proficiencies. The aim was to foster a conceptual orientation of discovery process over "training," and to encourage students to find their own expression in reference to the specific conditions of their practice. To this end, I modified the course design to encompassing a range of modes in creative practices, from technical training and collaborative work in the SFU Media Maker Commons, to artworks created on-the-spot with immediately available, non-specialized resources. In addition to prioritizing resources in which practitioners speak firsthand about how and why they do what they do, such as Art21 (https://art21.org), Artbound (https://www.pbs.org/show/artbound/), and more in-depth videos and articles explicitly connecting the work of an individual practitioner to educational considerations (Fenstein, 1997; Arsem, 2011), I introduced a selection of academic resources more focused on the nature of defining and evaluating creative process (Hood and Kraehe, 2020; Schneider and Rohmann, 2021; Watson, 2014; Jackson, 2006).

Taking my cue from un-grading practices (Kohn and Blum, 2020), evaluation took the form of student-initiated reflection and analysis regarding their work, rather than

myself initiating discussion through comparison of student work to preconceived evaluation criteria. Although students were welcome to utilize documents in which I outlined an array of factors that might be productively considered as learning outcomes for each assignment, these were intended as points of departure for identifying what was meaningful or relevant to their interests, rather than a checklist mapped to a numerical index of performance. Students were invited to write a short paragraph discussing what was most meaningful or of greatest interest to them, what they would like to work on or what they might do differently in order to improve some aspect of their work, and to provide a "hypothetical" letter grade. A notable consequence has been the diverse ways in which students interpret their efforts. For example, two students may have divergent (yet legitimate) ideas as to why they might assign themselves an A- or a B. The important thing is that these determinations are derived from the student's own aims and sense of what is meaningful or important to pursue or achieve within the context of the course resources. In more than one case I have felt that lower self-assigned grades are perhaps indicative of very high—perhaps unreasonable—standards bordering on perfectionism, or a sense that there are specific predetermined skills to achieve or ranges of knowledge to acquire. In the context of Designs for Learning: Art, part of the goal has been to explore the relationship between what we find meaningful and how we conceive competence and achievement within a discipline, which is a particularly important consideration when designing and recommending activities for others that are intended to be beneficial in some way.

Perhaps the major difference between the Summer 2023 offering and that of 2022 was that I explicitly centered this process from the outset, eschewing a more roundabout approach toward more dialogical evaluation models. This perhaps speaks to the increased clarity in how I conceived the possibilities and limitations of my role as an educator, and my increased confidence in how I might translate this understanding into a straightforward and practical instructional methodology. As I explained to students, evaluation assessment is not exempt from experiential and experimental creative process, in that what we do in our own practice forms the conceptual and practical ethos of what we might recommend to others as potentially beneficial or "educative". There is no way to enter more deeply into such considerations without a degree of democratization and encouragement toward self-initiated practice within a peer community. In short, if educators want students to take their work seriously, students

must be treated as competent individuals who are able to reflect on their work and enter mature conversations about their aims, what they find meaningful, and how they might plan a course of action for future growth. The earlier we acclimatize to this essential interaction between learning and learning how to hypothesize, design, and live out modes of inquiry, the more experience we gain in negotiating the ups and downs of this process and accumulate different ways of moving our learning forward according to what we believe will be meaningful or satisfying to pursue. Even if students find this difficult to do, the conversation can then become about why this is and what they might need in order to develop in some capacity. There is nothing that might be placed outside this responsive and generative learning process.

Chapter 7. Centers of Expansion

7.1. Introduction

The undertaking of this dissertation has enabled me to draw out and bring into focus immanent features of my studio and educational practice. It has also been an opportunity to raise creative process to consciousness through immersion in a range of practical and more open-ended activities, including coursework, focused research and reading, protracted reflection on my own studio work, and ongoing discussion with students and colleagues. My sense of "creative process" has expanded to include a more conscious integration of arts-related activities, everyday experience, and finding ways to design coursework that accommodates various modes of inquiry across a diverse range of research interests. I have come to think of "creativity" not so much as a topic or a skill, but as an orientation that is foundational to the interdependent processes of learning and teaching. Educators and students indeed create something new together with each course and are in equal measures changed and effecting change in some way through these interactions. As the title of my dissertation suggests, this combined structure/process can be construed as facets or dimensions, or, as implied by the invocation of the skandhas, a continuous cycling of modes of perception and engagement. As I have indicated, some elements of the combined structures and processes informing contemporary arts and studio practices are amenable to focused analysis and control, whereas others are more difficult to trace although no less real in their influence. The challenge has been to find ways to articulate what is difficult to express about art and discovery in general, and by extension, the educational orientations that best support the flourishing of creative inquiry in all its forms.

In my concluding chapter, I will summarize predominant themes emerging from my dissertation and share what I think of as the revitalized or expanded perspectives on creative process and arts education that the doctoral work has inspired.

7.2. Retrospective Thematic Summary

Looking back over the thesis document, I felt the need to retrospectively identify thematic features across the five main chapters. This exercise has reinforced my initial intuition that the skandhas might function as an appropriate conceptual framework.

- Interconnectedness and interdependence of self, other, and the environment. This theme is present in all chapters and is discussed through various philosophical and spiritual perspectives such as Dogen's "true self" and Gestalt ontology. The reciprocal influence of self, other, and activity within the environment is also highlighted.
- 2. Relationship between technology, art, and creativity. This theme is present in chapters 3 and 4, where the role of technology in art education and practice is discussed. I emphasize that art is best not understood solely as a product of technical mediation and progress, but as an activity that is equally rooted in embodied experiences.
- 3. The parallel role of institutions and individual practitioners in shaping the definition of art. This theme is present in chapters 3 and 5, where I highlight the role of institutions in shaping the definition of art and how artists also take the lead in defining the scope of practice in relation to cultural and disciplinary tradition.
- 4. The concept of tradition in art education and how it can be understood, taught, and reshaped. This theme is present in chapter 5, where I focus on the idea of tradition in the context of art education and how it can be understood, taught, and reshaped through the idiosyncrasies of individual practice.
- 5. The non-linear nature of art-making process and the use of a "pragmatist" and meaning-based approaches. This theme is present throughout the dissertation and is highlighted in chapter 4, where I reflect on the format of the dissertation, stating that the non-linear nature of artmaking process and the use of language to describe it, suggests a more "pragmatist"

approach that involves multiple ways of collecting and analyzing data, rather than subscribing to only one way.

These very general thematic summaries, rather than being conclusive, describe a series of interdependent factors that might be variously interpreted and extended. They are also not conclusive in that the above is one among several iterations of this exercise, each attempt yielding a slightly different result. Each attempt was to a degree accurate, yet neither conclusive nor comprehensive.

7.3. Each Practitioner a Center of Expansion

I have endeavoured to present the topics of each chapter as equally important and attempted to structure my discussion in ways that minimized the notion of a linear, progressive form of argumentation. I have seen each chapter as a potential center from which the other topics radiate. Although an imperfect analogy, this image was inspired by a model once used to explain the manner in which the universe expands, in which we could imagine stars as points on the surface of a balloon that is being inflated. If we imagine ourselves as being suspended at some point inside a balloon, other objects on the surface of the balloon or similarly suspended in that space would appear to be moving away from us in all directions as the balloon is inflated. This would appear the same from any point in space within the balloon.³ Any given vantage point might appear to be the center of such expansion, although it would be more accurate to say that the field of space was itself expanding or even, according to some theories, self-generating, rather than its fixed dimensions and "contents" somehow expanding incrementally into a pre-existing space.

With regard to studio arts, the relevant analogy is that of an *expanding field of* self-generating practice, or each practitioner generating (expanding) the field of practice by means of realizing practice (manifesting artworks, moving inquiry and educational

frequencies: red shift denotes objects moving away from us, blue shift objects moving toward us. Most astronomical phenomena we can observe exhibit red shift.

123

³ The most compelling evidence that the universe is expanding in all directions is the ubiquitous presence of "red shift" in light emitting from astronomical phenomena such as galaxies and quasars. This is a characteristic of the Doppler Effect, which also governs sound waves. We are familiar with the Doppler Effect from the common experience of the sound of a siren changing pitch as it comes toward us and recedes into the distance. The same thing happens with light

concerns in certain directions, prioritizing certain ideas and activities over others). This would be an expansion from myriad "centers" of practice, rather than an expansion from a single point of origin or select points of origin posited as dominant or naturalistically determinant (for example, an expansion of artistic practice from a center conceived to be national or international cultural trends rather than the "granular" activities of individuals within a given cultural matrix). Being neither an astrophysicist nor mathematician, it is perhaps best to not go any further with this metaphor without more dedicated inquiry into the specifics! Nevertheless, this physics-inspired image offers a valuable way of thinking of the relationship between individual practice and the development, enrichment, and even progression of shared fields of practice. In short, every possible perspective is conceivably the center of generative potential, and every act within the realm of one's practice might contribute to a re-inscription of the boundaries and composition of practice. Both art and education can be thought of as partly "self-generating" simply through the pursuit and realization of our interests.

7.4. Walking Creates the Path

Markus Torgeby, a former competitive runner, found a way to heal his psyche and body by living alone in the Jämtland county forest in Sweden for extended periods of time. In combination with his views on the healing properties of the natural environment, Torgeby (2020) speaks of his need to forego the consumption of the opinions of others in order to discover his own unique purpose and outlook (p. 76). This is the potential shadow-side of dialogue, suggesting the importance of differentiating between the benefits of dialogue—partaking in views other than our own—and the temptation to devalue our own experience in comparison to that of others. Others do not necessarily know better than us, only differently according to their own unique knowledge and experience. Education, like art, is a responsive interaction between self, other, and environmental conditions that assumes its own form as it progresses, whose path is revealed through continued practice, and not solely as a mediation of accumulated perspectives derived from the works of other artists, theorists, or authors. Examples, models, and the opinions and perspectives of others can inspire and possibly help us discover our own orientations, but there is ultimately no complete model to recommend or reproduce, because neither we nor our path has previously existed. Too heavy a reliance on the experience of others can draw us away not only from our own unique

horizons of discovery, but also from what we might genuinely need in terms of personal development. Even our mistakes, wrong turns, and backtracking are ultimately a way forward. Chapter 18, verse 47 of the *Bhagavad Gita* (2007) states "It is better to perform one's own duties imperfectly than to master the duties of another" (p. 263). These views are echoed in Dostoevsky (1867/2017): "You never reach any truth without making fourteen mistakes and very likely a hundred and fourteen...To go wrong in one's own way is better than to go right in someone else's" (p. 146).

How do we teach something so variable, whose significance is predominantly defined through such twists and turns of individual inquiry? Gary Snyder's (1991) description of the role of the teacher in Zen practice is perhaps closest to my own conception of my role as educator in relation to art. In a notebook dating from my first years as a studio arts instructor, I copied the following passage from Snyder's (1991) article "Just One Breath" and inserted the word "art" as a way of clarifying my own ideas about the nature of art and arts instruction:

Original

No one—guru or roshi or priest—can program for long what a person might think or feel in private reflection. We learn that we cannot in any literal sense control our mind. Meditation cannot serve an ideology. A meditation teacher can only help a student understand the phenomena that rise from his or her own inner world—after the fact—and give tips on directions to go. A meditation teacher can be a check or guide for the wayfarer to measure herself against, and like any experienced guide can give good warning of brushy paths and dead-end canyons from personal experience. The teacher provides questions, not answers. Within a traditional Buddhist framework—of ethical values and psychological insight, the mind essentially reveals itself. (p. 54)

Modified

No one—mentor, teacher, exemplar, or tradition—can program for long what a person might think or feel in private reflection. We learn that we cannot in any literal sense control art. Art cannot serve an ideology. An arts educator can only help a student understand the phenomena that rise from his or her own inner world—after the fact—and give tips on directions to go. An arts educator can be a check or guide for the wayfarer to measure herself against, and like any experienced guide can give good warning of brushy paths and dead-end canyons from personal experience. The teacher provides questions, not answers. Within a contemporary arts perspective of ethical values and psychological insight, the scope and direction of each artist's practice essentially reveals itself. (p. 54)

Figure 7.1. Author's détournement ("rerouting") of text by Gary Snyder

We might offer our experience and perspectives to others not as truths or requirements, but for whatever value they may hold for their process of discovery. No one of us, nor any one school of thought or methodology of instruction in a discipline, can claim a privileged or comprehensive overview — this fiction must be set aside. As Torgeby (2020) cautions, "... it is never another's responsibility to make you into the person you are meant to be" (p. 88). I needed to hear this as a student and continue to remind myself of this as an instructor.

7.5. "Only make what you want to put out into the world."

I was once given the following advice by a Foundation Studies instructor, which I in turn continue to relay to my own students: *Only make what you want to put out into the world*. The memory of these words came and went for years until I was mature enough to understand their significance for me as an artist and instructor. I currently interpret this statement to mean that it is important to align each expression (no matter the form) with one's deepest aspirations, interests, and values. The important implication is that if we are not clear about what our deepest aspirations, interests, and values are, it is incumbent on us as dedicated scholars, practitioners—or even just as individuals and members of our community—to clarify them. How do we clarify them? By engaging in practice. But not "practice" in the sense of going through the motions or deferring doing something "for real" to an unspecified time in the future, but to do things, to the best of our ability, with wholehearted conviction in the here and now.

In a similar vein, my instructor also spoke of the importance of downplaying the psychology of distinctions between "student" or "professional" work, believing there is only work of varying intensities of substance and commitment. At the time, I recall interpreting my instructor's words as meaning that the practice of art will neither give back nor take us anywhere new if it is treated as a frivolous pastime. What we say and do in practice, including the orientations of thought and feeling that inform our actions, make a difference in the substance and trajectory of inquiry. With an increased sense of commitment, our work can take on greater vitality and inspire others to approach their own work with greater focus and conviction. When our conceptions of art and inquiry are manifested in the world, they have the potential to shift the quality and conditions of shared environment, which in turn can influence the perception and activities of others. We may not always be able to control or even witness the totality of these effects, but the potential for influence is an ever-present possibility.

Perhaps due to the slow-burning influence of my instructor's "parting words of wisdom" close to thirty-five years ago, the ethical dimension of practice has always been fused with the practicalities of communication in terms of, on the one hand, written and verbal expression, and on the other, form and material processes for me. It is all one movement that can be explored in all its variability and nuance. This has been especially true with regard to the social relations between students and myself as an instructor, or,

as has also been the case, between myself as a student and my own instructors. advisors, and mentors. As several passages of my dissertation suggest, the casual words and actions of instructors and students alike can exert profound influence, whether as speculative musings, a simple act of kindness that demonstrates inclusion and acceptance, a word of encouragement or advice, or as an opposing opinion compelling a clearer articulation of our own values. I wish I was able to further unpack the full range of influences in my life that have been educational yet not educational in the sense of formal training. The way we are with each other as colleagues and students, as well as the level of sensitivity we have to the environments and conditions we move in, also has the potential to exert influence. Reflection on the qualities and dynamics peculiar to such relationships must necessarily be folded into any conception of contemporary studio arts practice and education—creative inquiry is dependent on such heightened sensitization to what we encounter in our lives. As an educator, student, or practitioner in general, what do we want to put out into the world, considering its potential to re-inscribe the "givens" from which our sense of the world is constituted? Each artwork, each semester's coursework, and student response to coursework, is a statement of what one conceives art to be and an opportunity to reimagine what art can be.

7.6. Hidden Curriculum and Shadow Curriculum

I once boldly asserted in a seminar class that there was no teacher who did not on some level harbour a "hidden curriculum," and was promptly challenged by an alert student to make explicit my own *shadow* curriculum. "Shadow curriculum" and "hidden curriculum" were once used interchangeably, but now also describe distinct theoretical constructs that can be related on some level. "Hidden curriculum" (Martin, 1983; Giroux & Penna, 1979) denotes unintended or implicit agendas embedded in educational practice, either in course design or elements of classroom instruction (my intended use of the term in my statement). "Shadow curriculum," on the other hand, can refer to something like specialized supplementary studies outside of formal education like private after-school tutoring programs (Kim & Jung, 2019), but also forms of learning that challenge the dominant paradigms of formal, mainstream education (Richardson, 2011). My reply to the student's question perhaps incorporates elements of these varying connotations: my hidden/shadow curriculum is to help students discern and articulate

their deeper priorities and values, and to help students learn how to design and live out their own inquiry in the form that makes the most sense for them. It doesn't matter where we find what we need, just that we find it. Indeed, most of us tend to find what we need through a combination of sources that are sometimes contradictory, sometimes complementary. I would now add, as I mentioned in Chapter 1, that this is something that we can do as a supportive community of practitioners, despite the heterogeneous nature of our interests, ways of learning, and paths of inquiry. Derek Rasmussen's (2011) term "cultural transmission," as indicative of education as potentially distributed throughout all aspects of daily experience, is particularly apt in a contemporary arts context.

I would like to close with a quote from electronic musician Bogdan Raczynski. In a 2019 "Q and A" with Ben Rogerson for *Musicradar*, Raczynski was asked to provide a mid-career summary of what he had learned about music production, and, true to character, decried the fetishization of technology and the temptation to shape one's growth according to perceived norms, current trends, and even one's own predispositions. Raczynski emphasizes the importance of *discovering*, rather than simply asserting, how one's unique voice evolves through creative process. Although not my own words, they are close enough to my own aspirations as both an artist and educator, and (if I do indeed harbour any "ambitions" for others) describe what I hope for my students and all creative practitioners:

Focus your energy on finding the cleanest, simplest, and most direct lane to your true self. Sleuth out that vibrating din which is comprised not just of the art you enjoy; that's just the first layer.

Listen also to the experiences, people, heartbreaks, pleasures, sunshines, snowy days, tangibles and intangibles that are you. Within that maelstrom, that most personal milieu, lies the promised sound. And when your time is up, that output is all that lingers. How fortunate are you to have a chance to send a message to the future and potentially progress humanity? Seize it! (Question 4, Para. 2-3)

References

- Alberro, A., & Stimson, B. (Eds.). (1999). Conceptual art: a critical anthology. MIT Press.
- Applin, J. (2016). Hard work: Lee Lozano's dropouts. *October, 156*(156), 75–99. https://doi.org/10.1162/OCTO_a_00252
- Arnheim, R. (1969). Visual thinking. University of California Press.
- Arsem, M. (2011). Some thoughts on teaching performance art in five parts. *Total Art Journal*, 1(1), 1-11.
- Bateson, G. (1979). Mind and nature. Bantam Books.
- Bhagavad Gita (E. Easwaran, Trans). (2007). Nigiri Press.
- Bergsteiner, H., Avery, G. C., & Neumann, R. (2010). Kolb's experiential learning model: critique from a modelling perspective. *Studies in Continuing Education*, *32*(1), 29–46. https://doi.org/10.1080/01580370903534355
- Bergson, H. (1955). An Introduction to metaphysics, (T.E. Hulme, Trans). Indianapolis, Bobbs-Merrill.
- Birkhoff, G.D. (1933). Aesthetic measure. Harvard University Press.
- Blake, W. (1820). Jerusalem, Ch. 3, plate 55, lines 62-63. Wikisource. https://en.wikisource.org/wiki/Jerusalem._The_Emanation_of_the_Giant_Albion/Chapter_III
- Blitz, M. (2014). Understanding Heidegger on technology: On whether thinking can save us. *The New Atlantis*, Winter 2014, *41*, 63-80.
- Borton, T. (1970). Reach, touch, and teach: Student concerns and process education. McGraw-Hill.
- Bourdieu, P. (2018). The forms of capital. In Granovetter, M. (Ed.) *The sociology of economic life* (pp. 78-92). Routledge.
- Bowering, S. (2022). Zazen and self as environment. Religions, 13(2), 141.
- Cage, J. (2012). Silence: lectures and writings. Wesleyan University Press.
- Chang, B. (2019). Reflection in learning. *Online Learning*, *23*(1), 95-110. doi:10.24059/olj.v23i1.1447

- Csordas, T. J., & Harwood, A. (Eds.). (1994). *Embodiment and experience: The existential ground of culture and self* (Vol. 2). Cambridge University Press.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications.
- Curtin, D. (1994). Dōgen, deep ecology, and the ecological self. *Environmental Ethics*, *16*(2), 195-213.
- De Antonio, E. (Director). (1972). *Painters Painting: The New York Art Scene 1940-1970* [Film].
- De Certeau, M. (2021). Spatial practices: Walking in the city. In Mitrašinović, M & Mehta, V. (Eds.), *Public space* reader, (pp. 324-331). Routledge, Taylor & Francis Group.
- De Courcy, M., & Todd, S. (2009). The Intermedia catalogue. *The Michael de Courcy Archive*. http://www.intermedia.vancouverartinthesixties.com/home/default
- De Kooning, W. (with Hess, T. B., & Karpel, B.). (1968). *Willem de Kooning*. Museum of Modern Art.
- De Waal, C. (2013). Peirce, a guide for the perplexed. Bloomsbury.
- Dewey, J. (with Archambault, R.D.). (1964). *John Dewey on education*, (R.D. Archambault, Ed.). The Modern Library.
- ——. (1960). The quest for certainty: A study of the relation of knowledge and action. Putnam. (Original work published 1929).
- Dictionary.com (n.d.). Gestalt. https://www.dictionary.com/browse/gestalt
- Diehm, C. (2006). Arne Naess and the task of gestalt ontology. *Environmental Ethics*, 28(1), 21-35.
- Dostoyevsky, F. (2017). *Crime and punishment*. Slater, N.P. (Trans). Oxford University Press. (Original work published 1867).
- Driscoll, J. (2007). Supported reflective learning: the essence of clinical supervision? In Driscoll, J. (Ed.) *Practising Clinical Supervision: A Reflective Approach for Healthcare Professionals* (pp. 27-50).
- Durbin, P.R. (1968). Logic and scientific inquiry. Bruce Publishing Co.
- Emerson, R.W. (1981). *Selected writings of Emerson* (D. McQuade, Ed.) New York: Modern Library. (Original work published 1841).

- Epstein S (2010) Demystifying intuition: What it is, what it does, and how it does it. *Psychological Inquiry 21*(4). Taylor & Francis Group: 295–312. DOI: 10.1080/1047840X.2010.523875
- Falkenberg, T. (2014). Awareness, attention, and noticing in teaching and teacher education. In Thomas, L. (Ed.) Becoming teacher sites for teacher development in Canadian teacher education (pp.312-338). http://dx.doi.org/10.11575/PRISM/38782
- Feinstein, L. (Director). (1997). *Robert Irwin: the beauty of questions* [Film]. University of California Extension Center for Media Independent Learning.
- Foucault, M. (1988). Technologies of the self. In Martin, L. H., Gutman, H., & Hutton, P.H. (Eds.), *Technologies of the self: A seminar with Michel Foucault* (pp. 16–49). The University of Massachusetts Press.
- Follett, M. P. (1924). *Creative experience*. Longmans, Green and Co.
- Gardner, R. (2013, June). Introduction to debriefing. In *Seminars in perinatology* (Vol. 37, No. 3, pp. 166-174). WB Saunders.
- Gibbs, G. (1988). Learning by doing: A guide to teaching and learning methods. FEU, Oxford Brookes University.
- Giroux, Henry A., & Anthony N. Penna (1979). Social education in the classroom: The dynamics of the hidden curriculum. Theory & Research in Social Education, 7(1), 21-42, DOI: 10.1080/00933104.1979.10506048
- Gibson, James J. (2015). *The Ecological approach to visual perception*. Hove: Psychology Press. (Original work published 1979).
- Gold, M. E. (1999). *The complete social scientist: A Kurt Lewin reader*. American Psychological Association.
- Groys, B. (2010). Going public. Sternberg Press: e-flux.
- Hallen, P. (1999). The ecofeminism-deep ecology dialogue: A short commentary on the exchange between Karen Warren and Arne Naess. In Witoszek, N., & Brennan, A (Eds.), *Philosophical dialogues: Arne Naess and the progress of ecophilosophy*, pp. 274-280.
- Hambidge, J. (1923). *Dynamic symmetry in composition as used by the artists*. The author.
- Hanh, T. N. (2008). The environment is you: a talk by Thich Nhât Hanh--Denver, Colorado, August 29, 2007. *Human Architecture*, *6*(3), 15–20.

- ———. (2009). The heart of understanding: commentary on the prajnaparamita heart sutra. Levitt, P. (Ed.). Parallax Press.
- ——. (2012a). Fear: Essential wisdom for getting through the storm. Random House.
- ———. (2012b). You are here: Discovering the magic of the present moment. Shambhala Publications.
- Heidegger, M. (1954). The question concerning technology. *Technology and values:* Essential readings, 99, 113.
- Heidegger, M. (2001). *Poetry, language, thought,* (A. Hofstadter, Trans). Harper Collins.
- Helmholtz, H. von. (1863/1910). On the conservation of force. In Charles Eliot (Ed.), Harvard Classics: Scientific papers: physics, chemistry, astronomy, geology (pp. 181-220). New York: P. F. Collier.
- Henshilwood, C.S., d'Errico, F., van Niekerk, K.L. et al. An abstract drawing from the 73,000-year-old levels at Blombos Cave, South Africa. Nature 562, 115–118 (2018). https://doi.org/10.1038/s41586-018-0514-3
- Henshilwood, C. S., d'Errico, F., Yates, R., Jacobs, Z., Tribolo, C., Geoff A. T. Duller, Mercier, N., Sealy, J. C., Valladas, H., Watts, I., & Wintle, A. G. (2002).
 Emergence of modern human behavior: Middle stone age engravings from South Africa. Science (American Association for the Advancement of Science) 295(5558), 1278–1280. https://doi.org/10.1126/science.1067575
- Highhouse, Scott. (2002). A history of the T-Group and its early applications in management development. Group Dynamics: Theory, Research, and Practice. 6. 277-290. 10.1037/1089-2699.6.4.277
- Hood, E. J., & Kraehe, A. M. (2017). Creative matter: New materialism in art education research, teaching, and learning. *Art Education*, 70(2), 32-38.
- Houseley, L. (2014). Out of the blue: the essence and ambition of Finnish design. Gestalten.
- Honeychurch, K. (1996). Inside out / outside in: A comparative case study of two post-secondary visual arts students. [Doctoral Dissertation, University of British Columbia] https://open.library.ubc.ca/media/stream/pdf/831/1.0088798/1
- Irwin, R., (with Simms, M). (2017). Notes toward a conditional art. J. Paul Getty Museum.
- Judd, M., Judd, F., & Murray, C. (2019). Donald Judd interviews, (F. Judd & C. Murray, Eds.). Judd Foundation; David Zwirner Books.

- Kalupahana, D. J. (1987). The principles of Buddhist psychology. Albany, NY: State University of New York Press.
- Kennedy, G. N. (2012). The Last Art College: Nova Scotia College of Art and Design, 1968-1978. MIT Press.
- Kidel, M. (Director). (2001). Ravi Shankar: Between Two Worlds [Film].
- Kim, Young Chun & Jung-Hoon Jung (2019) Conceptualizing shadow curriculum: definition, features and the changing landscapes of learning cultures, Journal of Curriculum Studies, 51(2), 141-161, DOI: 10.1080/00220272.2019.1568583
- Kimmerer, R. (2013). Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants. Milkweed editions.
- Kiverstein, J., Van Dijk, L., & Rietveld, E. (2021). The field and landscape of affordances: Koffka's two environments revisited. *Synthese*, *198*(9), 2279-2296.
- Koffka, K. (1963). *Principles of gestalt psychology*. Harcourt, Brace & Wild. (Original work published 1935).
- Kohn, Alfie. (February 21, 2016). Why grades shouldn't exist [Video]. https://www.youtube.com/watch?v=lfRALeA3mdU
- Kohn, A., & Blum, S. D. (2020). *Ungrading: Why rating students undermines learning (and what to do instead)*. West Virginia University Press.
- Köhler, W. (2015). *The task of gestalt psychology*. Princeton University Press. (Original work published 1969).
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development (Vol. 1). Prentice-Hall.
- Koren, L. (2008). *Wabi-sabi for artists, designers, poets & philosophers*. Imperfect Publishing.
- Kretschmer, Angelika. 2000. Mortuary Rites for inanimate objects: The case for hari kuyō. *Japanese Journal of Religious Studies*, 27: 379–404.
- Kuhn, T. S. (1970). The structure of scientific revolutions. University of Chicago Press.
- Kuk, H. S., & Holst, J. D. (2018). A dissection of experiential learning theory: Alternative approaches to reflection. *Adult Learning*, 29(4), 150-157.
- Lewin, K. (2013). *Principles of topological psychology*. Read Books Ltd. (Original work published 1936)

- Marshik, T., & Cerbin, W. (2022). Learning Styles and Cognition. In *Investigating Pop Psychology* (pp. 56-65). Routledge.
- Marshik, T. (April 2, 2015). Learning styles & the importance of critical self-reflection [Video]. https://www.youtube.com/watch?v=855Now8h5Rs
- Martin, Jane. (1983). What should we do with a hidden curriculum when we find one? In Giroux, H. & Purpel, D. (Eds.) The hidden curriculum and moral education (pp. 122–139). Berkeley, California: McCutchan Publishing Corporation.
- Marxen, E. (2009). Therapeutic thinking in contemporary art or psychotherapy in the arts. The Arts in Psychotherapy, 36(3), 131–139. https://doi.org/10.1016/j.aip.2008.10.004
- Mohorčich, J. (2017). Scale, noosphere two, and the anthropocene. In Sustainability and Peaceful Coexistence for the Anthropocene (1st ed., pp. 101–115). Routledge. https://doi.org/10.4324/9781315206820-8
- Moor, R. (November 21, 2022). Deadwood: An American's brutal apprenticeship in the delicate art of Bonsai. *The New Yorker*. 24-31.
- Morris, T. H. (2020). Experiential learning–a systematic review and revision of Kolb's model. *Interactive Learning Environments*, 28(8), 1064-1077.
- Morriss-Kay, G.M. (2010), The evolution of human artistic creativity. *Journal of Anatomy* 216: 158-176. https://doi.org/10.1111/j.1469-7580.2009.01160.x
- Naess, A. (2005). Interpretation and preciseness. In Drengson, A., and Glasser, H. (Eds.), *The selected works of Arne Naess volumes 1–10* (Vol. 1, pp. 5-523). Springer. (Original work published 1953).
- ——. (2009). The ecology of wisdom: Writings by Arne Naess. Catapult.
- ———. (2005). An example of place: Tvergastein. In Drengson, A., & Glasser, H. (Eds.), The selected works of Arne Naess volumes 1–10 (Vol. 10, pp. 339–59). Springer.
- ——. (1989). *Ecology, community and lifestyle: Outline of an ecosophy*, (D. Rothenberg, Trans. & Ed.). Cambridge University Press.
- ——. (1972). The pluralist and possibilist aspect of the scientific enterprise. Universitetsforlaget.
- ——. (1966). Communication and argument: Elements of applied semantics, (A. Hannay, Trans). Bedminster Press.
- Naess, A., & Hannay, A., (Eds.). (1972). *Invitation to Chinese philosophy: Eight studies*. Universitetsforlaget.

- Nagy, E. E. (2016). The industrial connections in Donald Judd's art. Studies in conservation 61(S2), 147–152. https://doi.org/10.1080/00393630.2016.1181316
- Nishijima, G., & Cross, C. (2006). *Master Dōgen's Shōbōgenzō*, Book 4.
- Oakeshott, M. (2017). The idea of a university. In Keeney, P. & Barrow, R. (Eds.) *Academic ethics* (pp. 9-16). Routledge. (Original work published 1950).
- Owen, S. (1992). *Readings in Chinese literary thought.* Council on East Asian Studies, Harvard University Press.
- Oxford University Press (1911). Gestalt. *The concise Oxford dictionary of current English*. (1st ed., p. 503).
- Oxford University Press (2015) Holism. Oxford dictionary of English. (3rd ed., p 2134).
- Oxford University Press (1911). Holism. *The concise Oxford dictionary of current English*. (1st ed., p. 570).
- Oxford University Press. (2015) Dimension. *Oxford dictionary of English*. 3rd ed. (p. 1239).
- Phaidon. (2016, June 9). *How Marcel Breuer and his bike changed the chair*. https://www.phaidon.com/agenda/design/articles/2016/june/09/how-marcel-breuer-and-his-bike-changed-the-chair/
- Pinar, William. (1978): The reconceptualisation of curriculum studies. *Journal of Curriculum Studies*, *10*(3), 205-214.
- Pio, E. (1988). Buddhist psychology: a modern perspective. Abhinav Publications.
- Pólya, G., (with Conway, J.H.). (1958). How to solve it: a new aspect of mathematical method. Princeton University Press.
- Raczynski, B, and Roberson, B (April 12, 2019). 5 things I've learned about music production. *Musicradar*. https://www.musicradar.com/news/bogdan-raczynski-5-things-ive-learned-about-music-production
- Rancière, J. (2009). The emancipated spectator. Verso.
- Randall, K., Isaacson, M., & Ciro, C. (2017). Validity and reliability of the Myers-Briggs personality type indicator. *Journal of Best Practices in Health Professions Diversity*, 10(1), 1–27.
- Rasmussen, D. (2011). Some honest talk about non-Indigenous education. In E. Shaker (Ed.), Bright ideas: Students and educators challenge limits on education (pp. 19-33). Our Schools/Our Selves.

- Reed, D. (February 17, 2017). Painting paintings (David Reed) 1975 [Video]. Gagosian Quarterly. Gagosian.com. https://gagosian.com/quarterly/2017/02/24/painting-paintings-david-reed-1975/
- Reinhardt, A. (with Rose, B.). (1975). *Art-as-art: the selected writings of Ad Reinhardt,* (B. Rose, Ed.). Viking Press.
- Rian, J. (2002). Thought balloons and other artificial mysteries: Interview with Martin Walde. *Purple*, *12*(2), Summer 2002 (148-153).
- Richardson, T. (2011). Navigating the problem of inclusion as enclosure in native culture-based education: Theorizing shadow curriculum. *Curriculum Inquiry*, *41*(3), 332–349. https://doi.org/10.1111/j.1467-873X.2011.00552.x
- Rosenberg, A. (2011). Philosophy of science. Taylor and Francis. https://doi.org/10.4324/9780203807514
- Rosenberg, H. (1983). *Art on the edge: Creators and situations*. University of Chicago Press.
- Russell, B. (2013). *Mysticism and logic*. Courier Corporation. (Original work published 1917).
- Russell, B. (2008). The scientific outlook. Routledge. (Original work published 1931). https://doi.org/10.4324/9780203875384
- Schimmel, P., Noever, P., & Stiles, K. (1998). Out of actions: between performance and the object, 1949-1979. Thames & Hudson.
- Schneider, V., & Rohmann, A. (2021). Arts in education: A systematic review of competency outcomes in quasi-experimental and experimental studies. *Frontiers in Psychology*, *12*, 623935.
- Schön, D. A. (1992). The Reflective practitioner. Routledge. https://doi.org/10.4324/9781315237473
- Serra, R., (with Rose, C.). (2001, December 14). Charlie Rose: Interview with Richard Serra [Video]. https://www.youtube.com/watch?v=ml2j8ql3TPY
- Serra, R. (2011, December 13). *Interview with Richard Serra: San Francisco Museum of Modern Art* [Video]. https://www.youtube.com/watch?v=0Cs2QgfxFnk
- Smith, B. (Ed.) (1988). Foundations of gestalt theory. Philosophia.
- Snyder, G. (1991). Just one breath: The practice of poetry and meditation. *Tricycle: the Buddhist review*, 1(1), 54-61.
- ——. (1983). Axe handles. North Point Press.

- ——. (with McLean, W. S.). (1980). *The real work: interviews and talks, 1964-79*, (W.S. McLean, Ed.). New Directions Publishing.
- Spinoza, B. (1992). Ethics: treatise on the emendation of the intellect and selected letters. (S. Shirley, Trans., & S. Feldman, Ed.). Hackett Publishing Company, Incorporated.
- Stables, A., & Olteanu, A. (2023). Semiotics in Learning and Education. *Bloomsbury Semiotics Volume 3: Semiotics in the Arts and Social Sciences*, 129.
- Stein, R., & Swan, A. B. (2019). Evaluating the validity of Myers-Briggs Type Indicator theory: A teaching tool and window into intuitive psychology. Social and Personality Psychology Compass, 13(2), e12434–n/a. https://doi.org/10.1111/spc3.12434
- Stevens, M., & Swan, A. (2004). *De Kooning: An American Master*. Alfred a Knopf Incorporated.
- Stommel, J. (Jan 3, 2022). Compassionate grading policies. Jesse Stommel.com. https://www.jessestommel.com/compassionate-grading-policies/
- Tanahashi, K., & Levitt, P. (Eds.). (2013). *The essential Dōgen: Writings of the great Zen master*. Shambhala Publications.
- Titchener, E.B. (1911). A text-book of psychology. The Macmillan Company.
- Torgeby, M., and Torgeby, F. (2020). *Under the open skies*. Harper Collins.
- Twain, Mark. (1953). *The adventures of Tom Sawyer and Huckleberry Finn*. Collins.(Original work published 1884).
- Uchiyama, K. (2018). Deepest Practice, Deepest wisdom: Three fascicles from Shōbōgenzō with commentary. Simon and Schuster.
- ——. (2005). How to cook your Life: From the Zen kitchen to enlightenment. Dōgen's classic instructions for the Zen cook with commentary by Kosho Uchiyama Roshi, (T. Wright, Trans.). Shambhala Publications.
- ——. (2004). Opening the hand of thought: Foundations of Zen Buddhist practice. (D.T. Wright, J. Warner, and S. Okumura, Trans.). Arkana.
- ——. (1973). Approach to Zen: The reality of zazen/modern civilization and Zen, (T. Wright, S. Yenik, & F. Stober, Trans. And Eds.). Japan Publications.
- Uhlin, G. (2010). TV, time, and the films of Andy Warhol. Cinema Journal 49(3), 1-23. doi:10.1353/cj.0.0205.

- Veine, S., Anderson, M. K., Andersen, N. H., Espenes, T. C., Søyland, T. B., Wallin, P., & Reams, J. (2020). Reflection as a core student learning activity in higher education: Insights from nearly two decades of academic development. *International Journal for Academic Development*, *25*(2), 147-161.
- Vogel, J. (2015). The artful wooden spoon: How to make exquisite keepsakes for the kitchen. Chronicle Books.
- Von Ehrenfels, C. (1937). On gestalt-qualities. Psychological Review, 44(6), 521.
- Waddell, N., & Abe, M. (2002). *The heart of Dōgen's Shōbōgenzō*. State University of New York Press.
- Waddington, D. I. (2005). A field guide to Heidegger: Understanding 'The Question Concerning Technology'. Educational Philosophy and Theory, 37(4), 567–583. https://doi.org/10.1111/j.1469-5812.2005.00141.x
- Watson, J. S. (2014). Assessing creative process and product in higher education. *Practitioner Research in Higher Education*, 8(1), 89-100.
- Weschler, L. (2008). Seeing is forgetting the name of the thing one sees: Over thirty years of conversations with Robert Irwin. University of California Press.
- Whitehead, A.N. (1978). Process and reality: Corrected edition. New York, NY: The Free Press. (Original work published 1929).
- ——. (1967). Science and the modern world / Lowell lectures. Free Press. (Original work published 1925).
- ——. (1968). Modes of thought. The Free Press. (Original work published 1938).
- ——. (2015). *The concept of nature: Tarner lectures*. Cambridge University Press Online.10.1017/CBO9781316286654. (Original work published 1920).