

A SYSTEMS MODEL OF SUBJECTIVE CREATIVE WELLBEING:
IMPLICATIONS FOR THE INDUSTRIALIZATION OF CREATIVITY

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ABSTRACT

In the early 21st century, the industrialization of creativity is a defining framework of economic and creative life in the global market. It drives policies and decisions in national and local governments, in workplace and educational administrative departments, in communities and in the private creative lives of individuals. The “creative economy” is based on GDP as an indicator of economic wellbeing and of individual and group welfare. However, harnessing creativity to meet such metric goals necessitates a constrained, fragmented and prescriptive conception of creativity that seemed, in practice, to have paradoxically negative effects on both creativity and wellbeing. In response, the work in this dissertation suggests a conception of creativity that accounts for the intrinsic and reciprocal relationship between creativity and human-centred quality of life. It also reveals specific weaknesses in the objective metric model. Trans-disciplinary research identifies salient intersections between wellbeing and creativity and leads to a proposed systems model of Subjective Creative Wellbeing (SCWB). The permeable subsystems of the model attempt to account for interdependent psychophysiological and socio-environmental forces, states, and behaviours that occur in and facilitate SCWB. The framework assumes that creative domains are analogous to cultures; thus both individuals and creative domains can be positioned as the self-system of the model. Findings suggest that the contingent assemblage of economics-politics-technology-creativity aligned with neoliberal creative and knowledge economies is detrimental to the temporal, physical, social, motivational, and self-regulatory subsystems of the SCWB model, thereby contributing to dysfunction in the self-system. The model and associated research can better inform policy and institutional decision-making, and can assist in advocating for, fostering, and facilitating the creative wellbeing of individuals, cultures and creative domains.

DEDICATION

To Carol and Emma

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1. INTRODUCTION

Creativity is, to use the ubiquitous phrase, “trending” right now. Yet for all of the research and attention that has been given to driving creativity forward, it is, in fact, being undermined, and this is occurring at a significant cost to personal and social wellbeing. It is important to discover why this may be so and why creativity and wellbeing seem to be so inextricably linked. In this introduction, the context for the need for research into creative wellbeing will be established, the gaps in the research will be identified, and the purpose and methodology of the paper explained. Additionally, key questions will be posed, a definition of terms supplied, and the significance of the research will be identified. Finally, a model of Subjective Creative Wellbeing will be proposed and will be linked to an overview of the chapters in this work.

1.1 BACKGROUND

Around the globe, as economies and traditional industries struggle in the early 21st century, plans centered on concepts such as *creative industries*, *creative economies*, and *creative cities* are eagerly being implemented to fill the economic void. In Canada specifically, reports point out that new economic reforms, including these wealth-generating ideas underpinned by creativity, can help to contribute towards the GDP (see Appendix A). In a Canadian federal policy recommendation report, statistics were presented “showing creative industries contribute \$46 billion in real value-added GDP in 2007, which constituted 3.8 per cent of Canada’s real GDP... [as well as] 3.9 percent of national employment [in 2007]” (Conference Board of Canada 2008).

Recommendations in Canadian and international reports are usually centered on the creative industries, creative cities and the creative economy (see Appendix B) as a way for cities and regions to help themselves (Hesmondhalgh 2007, 145). These strategies are aimed at developing

and exploiting intellectual property through the licensing of creative ideas and objects as part of the *knowledge economy*.

The global business community has become a powerful promoter of the idea of ‘Knowledge Economy/Knowledge Society’. It uses the enhanced ability to mass-develop ‘new meaning’ (in the form of technological innovations) to shorten the time of converting these innovations into marketable goods and services, and to rush with them to the global market.... [It] focuses on the use of ICT [information communication technology] and mass-produced knowledge to increase value along the whole economic value chain. (United Nations Department of Economic and Social Affairs 2005, 141)

Municipal, provincial and federal governments have been implementing policies that systematically reshape cities towards facilitating these avenues of wealth generation via creativity (Government of Nova Scotia 2015; Manitoba Government 2015; Winnipeg Economic Development 2015; Government of Yukon Department of Economic Development 2014; New Brunswick New Democrats 2014; Lewis 2013; Commission on the Reform of Ontario’s Public Services 2012; Ontario Ministry of Tourism and Culture 2010; B.C. Premier's Technology Council 2010; Tal 2009; Bogomolny 2004; Grace 1991). As a result, the “values and practices of commercial sectors” are playing an increasing role in determining the “organization, commissioning, management, regulation, and authority of cultural sector capital, in the form of ideas and labour” (Gallagher 2015). The top-down organization of this creative talent entails the reshaping of cities, provinces, countries, their industries, and their workers in order to appear attractive to potential clients and talent, to be globally competitive, to foster and facilitate successful entrepreneurship, and to become busy progressive centers of technology innovation and research.

Participation in such a knowledge economy is considered to be enhanced by a specific skill set in workers and citizens, often called “21st century skills”. This requires a shift from knowledge acquisition centered on development of an internal knowledge base to *distributed cognition*, where “intelligence is distributed across brain, body, and world” (Jenkins 2009, 65). In other words, knowledge is “accomplished rather than possessed,” allowing for ways and “forms” in which to augment and “externalize memory,” as in a database (65). Other skills such as *networking* allow for like-minded people to *connect* and contribute to a *collective intelligence*, in which the sum of the parts is greater than the individual, and in which even those with small contributions are valued (Levy in Jenkins 2009, 65). In short, there is great emphasis on *externalization* and *distribution* of knowledge, memory and counsel through technology.

The emphasis on entrepreneurship and self-reliance in this paradigm is no better illustrated than in the phenomenon of creative workers needing to develop skills in *self-branding*. Tom Peters, a writer and speaker on the new economy, and author of the 1997 article “The Brand Called You” in *Fast Company* magazine, explained self-branding this way, “we are CEO’s of our own companies: Me, Inc. To be in business today, our most important job is head marketer for the brand called you” (Peters 1997). Davis (2003) states that this often involves “reorganization of our personal lives and relationships on the model of market relations... for economic gain” (41). Self-branding protagonists emphasize prerequisites to success as *exterior mediation of the self* as well as a need for *extroversion*. This entails the continual “living in the moment” and policing or censoring of the self and behaviours for an “audience to ensure validation” and *extrinsic rewards* from a market culture (Lasch 1979, 5). Such self-presentation and self-censorship for extrinsic approval represent, by definition, a negation of one’s sense of intrinsic self-worth. Artists are

being forced to *commodify* themselves and their creative processes and outcomes in order to acquire funding, recognition and a place in the *new economy* (Hood 2012; Bogomolny 2004; Bostock 1999). Additionally, the expectation placed on artists to self-market forces them to devote time to master another (unpaid) career ("head marketer" of one's brand) atop the considerably demanding career of mastery in a creative domain.

The new economy, the knowledge economy, the creative economy and the global economy are all concepts related to and driven by neoliberalism. Although there is no single critical conceptualization of neoliberalism, three common conceptualizations include 1) a policy paradigm, 2) hegemonic ideology, and 3) a distinctive form of governmentality (Larner 2000). These three conceptions are linked by a common ideology, namely “free-market fundamentalism” (Barnett 2010, 3), which encourages “the disembedding of economic relations from broader structures of normative steering” (Harvey 2005, 23). Emphasis on free market, deregulation, reduced government spending, privatization, austerity measures, and tax breaks are foundational characteristics of neoliberalism.

The optimum worker or citizen in the neoliberal knowledge and creative economies also exhibits specific behaviour traits. The Conference Board of Canada refers to many of these as “soft skills” (38). These traits include *competitiveness, compliance, global citizenship, efficiency, speed, flexibility, technological currency, group creativity, externalized knowledge, self-centeredness, self-reliance, external mediation of the self, extroversion, entrepreneurship, risk-taking, extrinsic motivation, hedonism, interpersonal skills*, and the *ability to persuade* (Marwick 2013; Romich 2012; Webber and Patterson 2011; B.C. Premier's Technology Council 2010; Jenkins 2009; Conference Board of Canada 2008;; Ravelli,; J. E. Davis 2003; Peters 1997; Lasch

1979,). Marwick emphasizes that individuals are encouraged to [integrate] “market logic into [their] personal li[ves] including education and relationships” (2013, 212). These behaviour traits are also suited to performance within a *time orientation* in which the present is intensified and compressed by a focus on extrinsic rewards (Ivey 2009, 27). Success, therefore, within the neoliberal creative economy is measured in relation to an individual’s *contribution* to a *knowledge-based* Canadian society, including any *trickle down* economic benefits to those who fall outside the creative class, that are in competition with the rest of the globalized world for wealth accumulation (B.C. Premier's Technology Council; Florida 2002). These skills and behavior traits correspond to a conception of human “wellbeing” that can be measured objectively in terms of “utility” (Fukuda-Parr 2013, 167).

In terms of education, “21st-century,” technology- and skills-centric institutions are the means by which creative workers are trained for the neoliberal knowledge economy. First, “higher education is ideally integrated into the system of production and accumulation in which knowledge is reduced to its economic functions and contributes to the realization of individual economic utilities” (Morrow 2006, xxxi). As one government policy report recommends, education and worker training should be focused on “new knowledge competencies—necessary to spin creative ideas into commercial products and services..., [which include] the need for multi-skilling and cross-disciplinary practices required to fuel the creative economy” (Conference Board of Canada, 37). Secondly, ongoing reductions in government spending have necessitated educational institutions’ partnering with private donors in order to fill the financial void. Bostock writes:

Corporatized universities are expected to raise a much greater proportion of their own revenue, enter into business enterprises, acquire and hold investment portfolios, encourage partnerships with private business firms, compete with other universities in the production and marketing of courses to students who are now seen as customers, and generally engage with the market for higher education. (4-5)

Bringing the “free market into universities [and colleges] has had serious ramifications and [resulted in] significant costs” (Currie 1998, 6). For example, the needs of corporate donors are met through the power of the rising education administration class who infuse market ideology throughout education, even in the humanities (where it rarely existed in the past). Vinkokur (2008) describes this shift in educational focus as an education that is designed to provide “knowledge production and training assisting in the maintenance and proliferation of a system premised on capitalist accumulation, profit maximization and market ethos spreading to all areas of political, economic and social life” (364). Therefore, a top-down agenda replaces curriculum input and design by teachers, experts in their fields, and students, experts in their own self-determination. There is diminished freedom of expression, questioning of authority, self-exploration, discovery, and access to creative ideas and objects that inspire and provide a link to heritage (Jeppsen and Nazar 2012, 90; Ivey 2009, 27; Levitin 2007, 225-6; Fleming 2006, 5). The negative impact on learners of neoliberalism in the classroom begins with a prescribed atmosphere of competition, and extrinsic incentives that create stress in students and impede pro-social behaviour, critical thinking, self-esteem and self-growth (Broom 2012, 17). Teachers are also being put under increased stress. Neoliberal interests have resulted in periodization of employment, increased workload, reduced academic freedom, and reduced union strength which is creating a climate of fear and isolation in which a focus on teaching is severely diminished (MacKay 2014; Easterly 2007, 773).

Privatization has also resulted in the commodification of educational research. Research funded through partnerships is claimed as intellectual property by the corporate entity involved (Fine 2011). Therefore, the knowledge economy rests not only on entrepreneurially creative cities and their innovative technology industries, but on *knowledge capital*—the knowledge generated by research within the education system. This marginalizes programs in the Arts and Humanities, for example, that don't produce desired knowledge capital (Fine 2011). It also reduces access to creative ideas, now privately owned, by learners and the public. This “ultimately lead[s] to a decrease in the generation of new knowledge” (Bostock 1999, 6). For further discussion and examples of neoliberal policies and of the creative economy's impact on educational policies, see Appendices 1 and 2.

Economist Fritz Machlup forewarned in 1962:

In aligning knowledge with economic values, the dominant knowledge economy discourse inhibits alternative conceptions of knowledge, including knowledge conceived in terms of morality and ethics, as freely given, as humanistic, as art, as the root of wisdom, as culture and tradition, and as an end in itself. (Machlup in Hudson 2006)

Further, when economic utilitarianism is the dominant concept for defining creativity, the pursuit and fostering of culture-based creativity becomes a devalued exercise in futility. Tusa states,

‘Creative,’ ‘creation,’ [and] ‘creativity’ are some of the most overused and ultimately debased words in the language. Stripped of any special significance by a generation of bureaucrats, civil servants, managers and politicians, lazily used as political margarine to spread approvingly and inclusively over any activity with a non-material element to it, the word 'creative' has become almost unusable. (2003)

There is a correlation between neoliberal use of the term *creativity* (and related terminology) and a diminishing capacity for development in wellbeing. This diminished capacity for development

includes loss of benefits to wellbeing by way of participation in the culture based creative process. In fact, this loss is reciprocal as both are interdependent which compounds the problem. The scope of this problem ranges from individual to global (Fukuda-Parr 2013; M. Davis 2006; Harvey 2005; J. E. Davis 2003). The use of the term *creativity* in the current economic and social context suggests either a limited understanding of the term and its related aspects or a selective mining of creativity research for ideological needs. Similarly, there has been an imbalanced shift in the meaning of wellbeing: neoliberal wellbeing refers to one's objectively measurable *utility* as a means towards economic success whereas most research referring to wellbeing refers to developing the entire scope of one's capabilities as an end in itself (Fukuda-Parr, 167). The limited conceptions of these terms exemplify what Laszlo and Krippner (1998) understand as a "fragmented way of approaching empirical phenomena" rather than considering the entire system which must be taken into account if it is to function (58).

1.2 PROBLEM

This research is undertaken in the context described above—that of a predominantly neoliberal and globalized economy at the beginning of the 21st century in which creativity and the "creative economy" are deemed to be critical to economic growth. It also takes place in the midst of an explosion of neuroscientific research that has changed the way we look at cognitive, biological, affective, and social processes and systems, including those associated with creativity and with wellbeing. Broadly, we have a better knowledge of the components and processes that allow us to be creative, and we have a better understanding of the processes and components of wellbeing. The problem, however, is that much of the research tends to address creativity and wellbeing as separate systems, to address creativity and wellbeing within the context of economic value, or to address the conjunction of creativity and wellbeing to react to dysfunction, rather than to prevent

it. Specifically, much research has been devoted to the cognitive aspects of creativity, for example to “music and the brain,” or to the ways in which we learn and internalize knowledge in a creative or other domain. Other research discusses culture and creativity or culture and self-identity. Additional evidence supports the use of arts therapy to combat various forms of ill-being. However, there does not appear to be a holistic conception of the ways in which creativity and wellbeing interrelate in life in an ongoing way.

1.3 PURPOSE AND SCOPE

If the components and processes of creativity and of wellbeing, along with their salient points of interrelationship, can be identified by combining research from across relevant disciplines, it should be possible to conceive of a model of creative wellbeing in order to identify what facilitates or impedes it. These findings and the resulting systems model will then be applied to the current creative context, where it may provide preliminary insights into the apparent dysfunction of creative wellbeing described in the background.

The research in this dissertation is built on critical analysis of existing trans-disciplinary, quantitative, and qualitative research in hopes of recognizing patterns in theories that can be united to form a viable framework for conceiving creative wellbeing. Some of the disciplines to be explored include sociology, social geography, ecology, embodiment, health sociology, anthropology, cognitive psychology, social psychology, behavioral psychology, humanist psychology, practical psychology, positive psychology, learned self-regulation, ontology, epigenetics, neurology, neuroscience, biology, musicology, performance art, history, philosophy, aesthetics, phenomenology, pedagogy, economics, macro-economics, media studies, political

science and ethics. This trans-disciplinary framework is also necessary for a critical and normative approach to exploring creativity and wellbeing.

Of necessity, the research will also involve identifying the complex interactions between creativity and wellbeing. Resulting intersections of creativity and wellbeing will be used as a framework for creating the model. A systems model will be used as a conceptual framework since, according to Laszlo and Krippner, social and psychological human systems with their resistance to boundary identification may be better conceived through General System Theory (49).

[P]henomena in the natural and human-made universe...invariably involve complex combinations of fields, and the multifaceted situations to which they give rise require an holistic approach for their solution. Systems theory provides such an approach and can consequently be considered a field of inquiry rather than a collection of specific disciplines. (51)

1.4 LIMITATIONS

There are some limitations to this approach and research. First, some aspects of creativity may yet be hidden and therefore difficult to measure/define. There may be gaps in the trans-disciplinary literature review that are unseen and need to be filled to give a clearer conception of SCWB. Also, the subjective nature of the research negates objective validity and verification. Additionally, since the system is subjective and applicable to all cultures and creative domains, individuals involved in specific domains can and should contribute elements to meet culturally-determined needs that are not accounted for here.

1.5 QUESTIONS

1. What are the known indicators of and contributors to wellbeing?
2. What are the known components and processes of creativity?

3. What are the relationships between creativity, the self, and wellbeing?
4. How do external forces (e.g., physical, temporal, social environments) influence creativity and wellbeing?
5. How do people regulate internal and external influences in order to facilitate and maintain creative wellbeing?
6. What do the findings and proposed model of creative wellbeing reveal about the current creative context?

1.6 SIGNIFICANCE

A systems model of creative wellbeing can be used as a hypothesis to be tested in various contexts in hopes of aiding in informing decisions concerning creativity, wellbeing, and related aspects, processes, and outcomes. Firstly, it can help in challenging established ways of thinking and the authority by which they occur. The goal here is to replace ill-informed recommendations and policies based on fragmented conceptions of creativity with an informed approach to decision-making that encompasses creative wellbeing and more effectively meets the self-determined, contextual, and creative wellbeing needs of individuals and cultures/domains.

Second, a creative wellbeing model can help to conceptualize the interconnection and interdependence of wellbeing with its socio-cultural contexts. This includes addressing how and why some individuals and groups suffer reciprocal inequalities, polarization, assimilation, etc. which impact creative wellbeing. This can also extend to use as an impact assessment referent connected to the outcomes of creativity policy, as part of secondary analysis. Third, this model can provide insights into the ways in which decisions in one part of the globalized world affect

others, and will point to areas in which a global-scope sense of responsibility is required because of direct or indirect effects on the creative wellbeing of local cultures or creative domains.

Fourth, this is intended as an important advocacy tool for culture-based creativity initiatives and people-centered development, at the experiential level, in the context of real lives, which emphasizes creative wellbeing as an essential aspect of human wellbeing. This includes illuminating essential contributors to creative domain wellbeing that may be relevant to other fields of wellbeing research. Finally, this study may provide a synthesis of research that could be used towards the formation of a recognized subjective creative wellbeing index, which can help in the navigation and management of human experiences, so that everyone has the freedoms, provisions and resources to enable a meaningful creative life and thus, a meaningful human experience.

1.7 DEFINITION OF TERMS

1.7.1 Subjective Creative Wellbeing

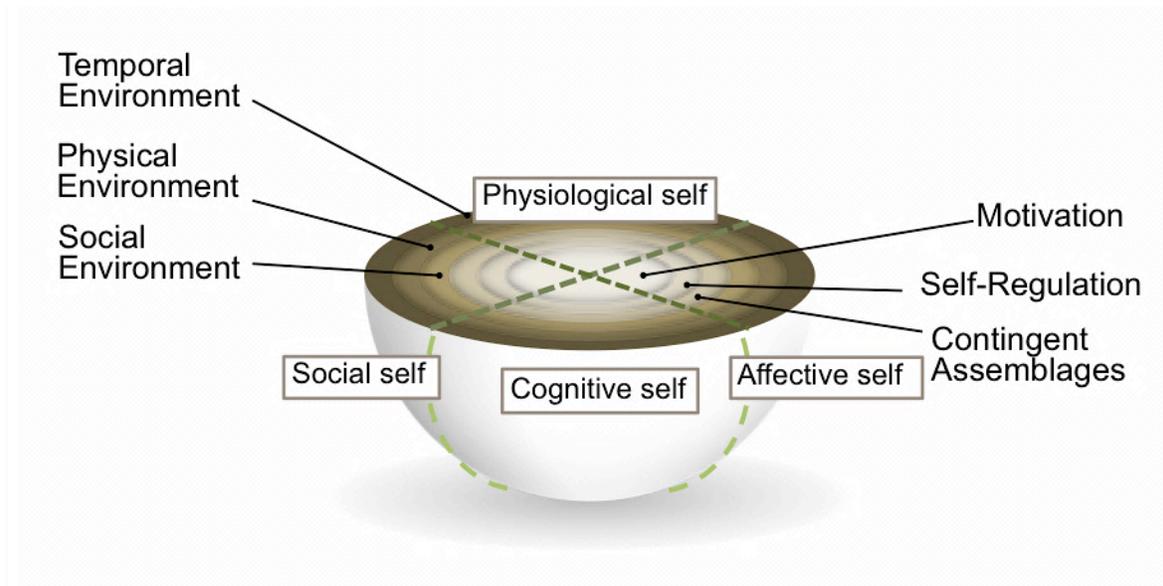
In this work, Subjective Creative Wellbeing (SCWB) occurs when the multi-dimensional self (whether individual or group) experiences a transformative process of holistic wellbeing through self-determined creative practice in mindful interaction with the physical, temporal and social environment.

1.8 OVERVIEW OF MODEL AND CHAPTERS

The SCWB Suprasystem is a multisystem model that functions to represent subjective creative wellbeing. The complete model may be broken down to observe single systems, components or relations between isolated systems and components, but the suprasystem will not retain its

unique ability to represent SCWB as a whole “unless all parts are present” (Laszlo and Krippner, 58). It is "a divisible whole, but functionally it is an indivisible unity with emergent properties” (58).

Figure 1. Systems Model of SCWB Suprasystem



1.8.1 Self-system

The Self-system (quadrants outlined in green in Fig. 1) is a subsystem within SCWB. It is the focal point of the suprasystem and will provide the perspective from which to view other subsystems and components. *Self* is conceived in this system as four-dimensional 1) *Physiological*, 2) *Cognitive*, 3) *Affective*, and 4) *Social* (Dodge, et al. 2012; Fleuret and Atkinson 2007, 106; Pollard and Lee 2003, 60; World Health Organization 1948, 100). The self-system accounts for the interdependence of the four dimensions. It also interacts and is interdependent with other subsystems within the suprasystem. The SCWB model exists from the perspective of the self.

Discussions on the self-system occur throughout this paper; however, it receives primary focus in Chapter 4 (Self-system). There, each dimension of the self is discussed in relation to its social and natural environment.

1.8.1.1 Physiological Dimension

The *Physiological Dimension* of the self-system accounts for mechanical, sensory, and related cognitive aspects of human embodiment, aspects of biochemical systems, ecology and the body, and the role these play in creative processes and SCWB. This interaction is discussed in Chapter 3 (Creativity) and Chapter 4 (Self-system), which are focused on theories of embodied cognition, whereby cognition is extended from beyond the boundary of the brain to the physical dimension and skillful use of tools in the creative process and creative learning (Crawford 2015; Rosch, Thompson and Varela 1993, 172-3). Also within Chapter 4, temperament is discussed as a physiological characteristic in relation to creative agency given contextual social forces (Cain 2013). In Chapter 8, the biophysical dimension also provides space for the way in which “perceptual faculties are sharpened” (Gard, et al. 2014, 9) through learned self-regulation skills, which involve managing the body’s response to stress. Physiological aspects of the self-system are of concern to the overall functionality of the system towards full scope capacity growth and SCWB.

1.8.1.2 Affective Dimension

Across Chapters 5, 7 and 8, the *Affective Dimension* of the self-system represents affect as omnipresent and functional in feelings, thoughts, and behaviour (Duncan and Barrett 2007, 1184-85), and therefore, as instrumental in creative processes and SCWB. Aspects of emotional intelligence (Brett, et al. 2003, 1), emotional appraisal (Lazarus 1991, 51), conflict processing (Kanske 2012, 3), and Learned Self-Regulation (Wilson and Cummings 2015), are explored and

are shown to facilitate such competencies as self-awareness, self-regulation, social awareness, relationship skills, and mindfulness—all of which are contributors to subjective creative wellbeing.

1.8.1.3 Social Dimension

The social dimension of the self-system accounts for the view that “[t]he self defines itself in relation to its social environment” (Ramachandran 2011, 274). It focuses on the internal interrelationship with the cognitive, physiological and affective dimensions of the self-system from a perspective of the self, rather than the social environment. The Social Dimension of the Self-system is introduced in Chapter 2 (Wellbeing), in which social freedoms, provisions and resources that lead to human-centred, full-scope capability are explored with reference to the self-agency needed for SCWB. In Chapter 5, the social processes (symbolic interactionism, reflexivity) that shape identities are explored. Self- and group identities and roles (Sharma and Sharma 2010, 118), along with self-coherence (Conway 2005) are discussed with reference to meeting psychosocial needs, a condition for SCWB.

1.8.1.4 Cognitive Dimension

The cognitive dimension of the Self-system accounts for processes, such as “perception, reasoning, and intuition” that are involved in what comes to be known as “knowledge” to humans (The American Heritage Medical Dictionary 2007). This dimension also accounts for “cognitive functioning involving knowledge,” the “cognitive skills for operating on it” (Bandura 1989) and cognitive freedom in regards to SCWB. This includes domain knowledge as critical components in the creative process and wellbeing. For example, in Chapter 3 (Creativity), the cognitive efficiency, fluency, and flexibility needed in creative thinking and improvisation relies in part on the constraints within a cultural framework, “conventions and rules” (Berkowitz, 2)

that become part of one's implicit knowledge in the form of referents or schemas, "generalized motor program[s]" (Pressing 1998, 50), providing "the freedom that is at the heart of improvisation" (Berkowitz 2010, 180). In Chapter 4 (Self-System), the relation between the cognitive processes involved in the self-memory system and self-coherence are discussed. Here, a sense of self-coherence is critically linked to a sense of wellbeing in that a positive sense of coherence provides a mixture of "optimism and control" (Collingwood 2015) in lives. In Chapter 8, cognition is shown to play a large part in the role of top-down, learned self-regulation strategies and skills that can aid in creative thinking (Dietrich 2004), risk taking (Khatena and Torrence 1973, 28), flow (Csikszentmihalyi 1991), improvisation (Berkowitz 2010) and the management of negative feedback (Gard, et al., 6) in SCWB. The cognitive dimension of the self-system underpins all psychological processes and related processes in the creative process and wellbeing of individuals.

1.8.2 Intermediary Systems

There are three intermediary systems: Motivation System, Self-Regulation System, and the Contingent Assemblages System (adapted from Slack and Wise [2015]). These systems mediate between the experiential aspects of the Self-System and the three Environmental Systems. All boundaries between these systems and others are permeable from all directions.

1.8.2.1 Motivation System

All conscious or subconscious goal-orientated behaviour, [including creativity], is motivated (Nevid 2013, 289). The Motivation subsystem is the innermost subsystem of the suprasystem and it, along with the Self-regulation system and Contingent Assemblage system, is a mediating subsystem between the aspects of the self and the environment. The motivation system accounts

for relationships between goals, values, beliefs, cognition, affect and behaviour. More specifically, this subsystem accounts for motivation orientation and related affective and cognitive experiences (Ryan 2009, 339), as well as for the ways in which implicit motive classes relate to explicit motives and shape motivational experiences (Kehr 2004, 488). Together, these dimensions of motivation are deeply connected to goal management (Conway, 595), values (Schwartz 2012, 4), various aspects of cognition (Ferguson, Hassin and Bargh 2008, 153), and motivational learning (122). This subsystem of motivation has significant consequences to the processes and outcomes of individual and group creative and related wellbeing (Amabile 1985).

Preliminary references to the characteristics and impact of the motivation subsystem appear in early chapters, depending on their immediate relevance to, for example, critical agency (Ch. 1: Wellbeing), creative persistence (Ch. 2: Creativity), affect (Ch. 3: Self), and cultural values (Ch. 4: Culture and Creative Domains). For example, in Chapter 6 it is suggested that cultural values relate to motivational, goal-oriented domains “that guide the selection or evaluation of actions, policies, people, and events” (Schwartz, 4), and this refers equally to creative domains.

The primary discussion of motivation in relation to SCWB, however, occurs in Chapter 6, after key interrelationships between wellbeing, creativity, self and context are established. The goal is to uncover the complex, mediating relationship between motivation and, for example, creative growth (Schultheiss 2008), persistence (Ferguson, Hassin and Bargh 2008), process focused learning and social capital (Gilbert 2009), and self-coherence (Ramachandran 2011). It will also show that extrinsic motivations, such as “evaluation, surveillance, reward, competition, restriction of choice, and time pressures” (Amabile 1985, 394), undermine the self-directed motivation needed in creativity.

1.8.2.2 Self-regulation System

The Self-regulation system is the second innermost subsystem of the SCWB model, and is one of three “mediating” systems between self and environment. This system accounts for the relationship between self, autonomic system, psychophysiology and behaviour (Bandura 1999, 6), involving the body’s ability (or lack thereof) to regulate stressors and other negative feedback that can lead to maladaptive feelings, thoughts, and behaviour (Luszczynska, et al. 2006, 306). This has significant implications for motivation and wellbeing in the SCWB process.

The Self-regulation system is discussed in some earlier chapters, with reference to specific characteristics of wellbeing, creative cognition, or the biology of the self-system; however, the bulk of the discussion on self-regulation occurs in Chapter 7. In Chapter 7, the relationship between self-regulation and the maintenance of adaptive feelings, thoughts, and behaviour (Gard, et al. 2014) is explored. Learned Self-Regulation (LSR) (Wilson and Cummings, 1) is discussed as an ongoing approach needed in creative processes. For example, creative improvisation is shown to benefit from the “attenuation of the brain’s self-monitoring system” (Limb and Braun, 3); that is, regulating and reducing a sense of public self-awareness or self-critique enhances other processes involved in improvisation. LSR is shown to be useful in aiding such attenuation (Gard, et al., 11). LSR is also discussed briefly in Chapter 3 (Creativity), in terms of sustaining and directing attention (Crawford, 15), essential resources used in both creative thought (Dietrich 2004, 4) and deliberate practice (Ericsson, Krampe and Tesch-Römer 1993, 368). The Self-Regulation Subsystem is, therefore, a critical component in the SCWB model.

1.8.2.3 Contingent Assemblages System

Within the SCWB suprasystem, the Contingent Assemblage subsystem, adapted from research by Slack and Wise (2015) into this model, is the third innermost subsystem. Contingent Assemblages are intermediary and “prescriptive” in that they “shape possibilities of behavior and thought, and language” (201). This system accounts for articulations of components of an assemblage, such as time-space-technology or economics-policy-creativity whereby particular constraints are formed. This subsystem also accounts for the forces that unite and maintain a given articulation. The system accounts for assemblages being “rarely deliberated,” “discriminatory” (203) (there is a cost benefit that is unequally distributed), and usually imperceptible by those constrained by them (167). Contingent assemblages have consequences directly linked to creative processes and wellbeing.

Aspects of the contingent assemblage system are discussed throughout the paper with reference to specific characteristics of the self-system; to freedoms, provisions and resources; and to functionings, capabilities and critical agency. However, the discussion of assemblages occurs predominantly in Chapter 5 (Culture) in terms of “psycho-sociological fragmentation” and cultural “disembedding” (M. Adams 2007, 43), the mental experience associated with the dissolving of the traditional cultural scripts whereby agency is shaped (Harvey 2005, 23), and the facilitation of intelligibly communicated ideas (Berkowitz, 180). An *economics-politics-technology-creativity* assemblage is proposed by this author as contingent with the knowledge economy (Conference Board of Canada 2008), creative city planning (Florida 2002), commodification of education (Bostock 1999), 21st century workplace skills (Marwick 2013), and self-commodification (41), all of which constrain individual and group agency. Although

contingent assemblages could be said to form part of the social environment subsystem, they are treated separately in the model because they have a prescriptive mediating relationship between larger social and physical environmental forces and the self.

1.8.3 Environmental Systems

Three Environmental systems: Social Environment, Physical/Natural Environment, and Temporal Environment account for the affective, and social, physiological, spatial, psychological, and temporal experiences acting on the Self-System and mediated by the three Intermediary Systems.

1.8.3.1 Social Environment System

The Social Environment subsystem accounts for various social forces (real and virtual) that shape beliefs, values, goals and behaviour, and affect psychophysiological health, wellbeing, and creativity. Forces include economic, political, resource, intellectual, welfare, and human centered progress interests. Social forces affect ecology, demographics, social support networks, quality of life, and economic and noneconomic activity, all of which are inextricably linked to the facilitation or impediment of wellbeing (CSDH 2008) and creative wellbeing.

The Social Environment system is discussed throughout the paper. In chapters 3 and 7 the social environment needed for aspects of the creative process are explored, including the need for safe, supportive social climates in which empathy, mutuality, and a sense of responsibility and connectedness to others facilitate crucial skills and behavior related to intrinsic creativity (Gilbert 2009; Dissanayake 2007). In Chapter 3 (Creativity), shared cultural frameworks are described in part as providing schemas that facilitate the cognitive efficiency needed in, for example, creative

thinking, risk taking, and improvisation (Pressing 1998), as well as the framework for the intelligible communication of ideas (Berkowitz 2010). In Chapter 5, (Culture) transmission of traditional knowledge and the activities of a culture are shown to be social forces that shape group identity, cohesion, and coherence (Eisenberg 2006). It will be shown that creative domains are cultures; that is, they are internally contested, social processes with four characteristics: being an activity, being permeable, having an ongoing transmission of heritage and tradition, and acquiring knowledge by learning (Eisenberg 2006; Wolf 1982, 387). These areas of culture are revealed to be manifest as representations, practices, and experiences of social time and space (Slack and Wise 2015). Chapter 5 (Culture) reveals how group identity is socially constructed, and manifested as culture, shown to contribute to coherence (Conway 2005). A third area accounted for is the way in which a sustained autobiographical narrative plays a central role in activities involving beliefs, values, and goals (Schwartz 2012), creative thinking (Dietrich 2004), thinking societies (Misztal, 1321), mutuality (Dissanayake 2007, 794) and self-esteem (Collingwood 2015). A fourth area accounted for is the way in which aspects of the physiological and affective self are either congruent, or not, with the social norms of a given social or natural environment (Cain 2013; Gilbert 2009). A fifth area of investigation is the way in which dominant social forces, e.g., nations, globalization, and dominant ideology, affect the self, culture, and creative domains across the globe (Slack and Wise).

Chapter 5 examines the ways in which dominant economic and political social forces can influence wellbeing and creative wellbeing. More specifically, ideologies and entities that operate in the current creative environment are examined. For example, neoliberalism, globalization, the World Bank, International Monetary Fund (IMF), and Non-Government

Operatives (NGO's) play significant roles in the decision-making of economically struggling states (Richards and Gelleny 2013, 193), resulting in many unforeseen negative effects (Fukuda-Parr 2013; Barnett 2010, 3) for SCWB.

In the Introduction and Appendix A, the reliance on the GDP as the supreme model by which decisions are made regarding the metric indication of social welfare is discussed and shown to manifest in the policies that fuel creative cities, knowledge economy, and the industrialization of creativity and that have had profound effects in regard to SCWB (Brückner and Lederman 2015, 2-3; Stiglitz, Sen and Fitoussi 2010, 1; Global Health Watch 2008, 12).

1.8.3.2 Physical Environment System

The Physical Environment system is a subsystem of the SCWB suprasystem. This system accounts for human made (*social space*) and natural environments in which humans live, learn, and work and the significance they have on psychophysiological health and wellbeing (UCL Institute of Health Equity 2016) within the framework of SCWB. In Chapter 3 (Creativity) this system is used to describe how *acoustic ecology* (Schaffer 1977, 205) and *attention ecology* (Crawford 2015, 17) are conducive to creativity in that they provide the environmental conditions necessary for directing and sustaining attention, creative thinking (Dietrich 2004), and deliberate practice (Ericsson, Krampe and Tesch-Römer 1993). In Chapter 4 (Self-System), a discussion contrasting classroom face-to-face-learning and virtual learning environments suggests these different leaning environments affect embodied cognition and related multi-sensory experiential learning, both of which are involved in creative knowledge acquisition and rely on an engagement with the real world (Crawford 2015; Edmunston 2012; Pea, et al. 1999, 50). Here it is suggested the psychological outcomes related to these processes may impact the

types of psychological indicators indicative of wellbeing and SCWB. In Chapter 5, the Social Environment is discussed in terms of the effect of a dominant external social force and consequences to local cultural *representations* of social space, which are shaped to meet “beliefs and practices...[and are] experienced as space as it is lived” (Slack and Wise, 190). The discussion is expanded by revealing the assemblage of time-space, explained, in part, as a “space bias” of a culture that thrives on “speed, [and] efficiency” and “exerts control over space; its goal is the maintenance over society from a distance” (190). This space bias has been shown to potentially undermine the creative wellbeing of cultures and creative domains that rely on face-to-face-transmission of culture in traditional spaces. Chapter 5 looks at the effect of ecological harm done to the habitats of local culture through the globalization process, which in turn affects creative practices (Westra 2011, 164). Also in Chapter 5, the effect on the human condition of short-term living and work environments as a consequence of increasing periodization of employment is examined (M. Adams 2007; Sennett 1998). This results in stress related to not being able to sustain a coherent narrative that includes a stable living and working space.

1.8.3.3 Temporal Environment

The Time system is the outermost subsystem of the suprasystem. Time and space, or space-time is a context for all human activity. In this model, the term “time” is used in order to differentiate certain characteristics of this feature from those of the physical environment. This system accounts for human dimensions of time, including the different ways in which individuals and groups “experience the occurrence of events in time” (Smyntyna 2009, 183) and perceive natural manifestations of time in different ways, such as cyclic or linear. Humans also experience time as having an “ordering effect on the structure and coordination of behaviour” (Bergmann 1992, 99), as well as on the pace of behaviour and on the expectations for such behaviour. Time

implies change; without change, there is nothing to perceive, and one cannot account for the phenomenon of growth, which is an implicit feature of creativity and wellbeing.

Discussions of the characteristics of the time system are distributed throughout this paper, depending on the relevance of specific characteristics to wellbeing, creativity, self, culture, motivation, and self-regulation. For example, time is significant in terms of the positive and negative affective states associated with present, past or future orientations; a future orientation may manifest as hope or anxiety (see Chapter 4). In Chapter 5, the time system is discussed in terms of the human “relationship to time in cultural contexts, such as how everyday life has been temporalized” (Slack and Wise, 183). Here the temporal needs of a given local culture are contrasted with those of a dominant society, in which the clock dominates but is only one possible chronometer by which to organize beliefs and practices in time (Sharma 2014, 15). These orientations to or conceptions of time have a direct link to SCWB in that they play a role in the processes and outcomes of individual and cultural creative activity across the globe.

1.9 CONCLUSION

To conclude, the potential participation in creative processes that foster subjective wellbeing is likely to be compromised under neoliberal constraints. As such, development of a SCWB systems model can help in providing an informed reference tool for decision-making, providing knowledge that fills research gaps in terms of both creativity and wellbeing and their points of intersection. This knowledge can be used to replace ill-informed and or biased conceptions of creativity that may result in negative effects. The model can be used to pinpoint biases and or threats to cultural and individual circumstances by looking at forms of dysregulation within the

subsystems. Therefore, the model also can be used as an advocacy tool for individual and cultural wellbeing. It can also be used as a secondary analysis resource for policy implementation review whenever creativity and wellbeing intersect.

2. WELLBEING

The World Health Organization (WHO) (1948) conceives of *health* as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (100).

Fleuret and Atkinson (2007) explain,

This high profile use of ‘wellbeing’ aimed to re-conceptualize health and health care practice away from a focus on the individual and absence of specific diseases towards seeing health as a positive attribute. It has, however, taken time for the term to really come into wider policy use and begin to prompt a shift in conceptualizations of health and human flourishing. Thus, despite the early introduction of the term into the health field by the WHO, a major increase in its usage with respect to health has only occurred over the last 20 years, primarily in the domain of psycho-social health as pioneered by the positive psychology movement. (106)

Dodge, Daly, Huyton, and Sanders (2012) have attempted to define wellbeing “as the balance point (homeostasis) between an individual’s resource pool and the challenges faced”. The *resources* and *challenges* are the same: 1) psychological, 2) social, and 3) physical (230).

Wellbeing is generally described in terms of dimensions rather than a single definition, as it is a “complex, multifaceted construct” (222). Attempts to measure wellbeing generally fall into two overarching categories, *objective* and *subjective wellbeing*.

2.1 OBJECTIVE WELLBEING

Objective measurements of wellbeing include “biomedical functions” (Gillett, Andrews and Savelli 2016, x) (functional psychophysiological needs), material resources, income and education, reflected in positive emotions in one’s life. Most often, within capitalist societies, the term objective wellbeing is usually associated with income, preferences, and education.

2.1.1 Preferences, Income and Education

According to Dolan, Layard, and Metcalf, individual wellbeing may be assessed in terms of *preferences*; that is, “what is best for someone is what would best fulfil all of his desires” (4).

Although it is easy to understand how preferences may relate to subjective wellbeing, there are attempts to understand preferences in relation to objective wellbeing. “According to standard theory, more choice allows us to satisfy more of our preferences and this idea has informed the design of policies in health and education” (Dolan, Layard and Metcalf, 4). Many economic policies are based on the assumption that “all else equal, more income—or GDP—allows us to satisfy more of our preferences and so, at the monitoring level, GDP is often used as a proxy for wellbeing” (4). For example, the GDP allows for measurement of objective wellbeing (OWB) in terms of amount of income or level of education (Diener 2009; Ryff 1989). Hence, the more educated one is, the greater one's income, the more things one can acquire, and the greater one's wellbeing (see Appendix A).

The idea that satisfying preferences leads to wellbeing is problematic in that choices involve predictions about an external environment that is unpredictable and continually changing.

Therefore, the actual outcome of a preference is unpredictable. Another consideration is that choices based on preferences do not always coincide with what is known to contribute to other types of wellbeing; for example, drug addiction, being a Toronto Maple Leafs fan, or eating unhealthy will likely detract from physiological or psychological wellbeing. Further, preferences are limited to the choices available and the capacity to which an individual can act in achieving them. When choices and resources are limited, so are preferences.

2.1.2 GDP and Social Benefits

Proponents of objective measurement models such as the GDP assert that wealth accumulation is also the best way “to realize social aims or wellbeing” (Miklós and van den Bergh 2014, 5). For example, multi-national corporations (MNC) and foreign development investors (FDI), beneficiaries of and contributors to the globalization process, have been seen as improving the wellbeing of populations in states and regions where they invest. Qualitative research indicates there are direct correlations between MNC and FDI investment and an increase in government support for human rights and freedoms, and by extension, wellbeing. In attempting to attract investors, states adopt improved human rights and freedoms policies so as to ensure investors do not become associated with rights and freedoms abusers which can tarnish their reputation and impact their bottom line. Documented improved conditions to populations involved with MNCs and FDIs include “political participation, an open media, the right to form unions, religious freedom, and the freedom to travel...new jobs, new technology, [and] knowledge economy skills” (193).

However, the benefits of such globalization-shaped improvements to local cultures have been criticized as wellbeing investments with diminishing returns. The initial improvement in GDP in poor countries attributed to MNC and FDI relies on income inequality, which is initially lessened. However, if a state does in fact reach the status of an "advanced" state, the economic growth will eventually, inevitably, correlate to a return to the same income inequality (Brückner and Lederman, 2-3) (see Appendix A). In addition, negative ecological (Westra 2011, 164) and geographical (Jackson 2003, i) consequences, city slums (Lash 2001, 1789), and marginalization

and assimilation of local cultures (Ouellette 2013; Bruner 2001) have also been shown to accompany globalization processes that some research claims to contribute to wellbeing.

2.1.3 Utilitarianism

Utilitarianism is “a theory that the aim of action should be the largest possible balance of pleasure over pain or the greatest happiness of the greatest number” (Merriam-Webster 2015). In essence, it takes the view that if the majority benefits, there is a socially useful gain in wellbeing. Sen (1979) points out, however, that utility uses a metric that focuses not on the individual’s meaningful potential but on their emotional reaction (13). Furthermore, according to Blundun (2004), “Sen’s central critique of utilitarianism is that by reducing human motivation to the maximization of a person’s utility (however defined), utilitarianism effectively *eliminates agency*...It is the objectification of human beings which is *essential* to utilitarianism” (4). Decision-making centered on *utilitarianism* has been revealed to negatively affect self-determination, self-actualization, and other aspects of wellbeing.

2.2 SUBJECTIVE WELLBEING

Subjective wellbeing (SWB) can provide important information on wellbeing that OWB cannot. Dimensions of subjective wellbeing include life satisfaction, meaningful growth (eudemonics), transcendence, halcyonics, and somatopsychic wellbeing. In contrast to emotional satisfaction in life through metric accounts of subjective feelings about wellbeing, SWB refers to the self-determined satisfaction people feel with their own life and circumstances regardless of metrics. Shin and Johnson (1978) defined wellbeing as a “global assessment of a person’s quality of life according to his own chosen criteria” (478). This may refer to 1) the self-determined state of satisfaction, or lack thereof, in individuals or groups with reference to their lives or specific

aspects of it (United Nations Environment Programme 2007, 45; Sen 1999, 2) affect, the range of positive or negative moods and emotions (Diener and Suh 1997, 200); and/or 3) the number of choices or preferences a person has in shaping a life they desire (Dolan, Layard and Metcalf 2011; Diener 2009).

Usually, SWB refers to the following areas: physiological (e.g., health and safety); physical environmental (e.g., ecosystem, goods and services); psychological (e.g., confidence; freedom from stress and mastery [positive self-coherence]); sociological (e.g., sense of belonging, positive relationships); economics (e.g., income, work); and motivational (e.g., opportunities for advancement, accomplishment of goals). In addition, wellbeing exists at both individual and collective levels, and one is interdependent with the other. There is no single, universal indicator of positive wellbeing; each individual or culture is dynamic and unique. However, there are theories and types of wellbeing that may serve as reference points.

2.2.1 Hedonic Wellbeing

As previously stated, life satisfaction can be considered a subjective indicator of wellbeing.

According to Lebon (2014), the conception that a balance of “positive over negative emotions” equates to a self-determined “good life” refers to *hedonic* wellbeing (104). Similarly, Hefferon (2013) writes:

Hedonic wellbeing focuses on pleasure and satisfaction and is more widely researched as subjective wellbeing (SWB) (Satisfaction with life + High levels of positive affect + Low levels of negative affect). (3)

Many researchers, such as Lebon, criticize the theory that hedonism has meaningful benefits in the pursuit of wellbeing because wellbeing involves more than just experiencing positive emotions (105). In fact, research indicates that negative valence can accompany or precede meaningful growth. Carson (2010) writes, “creativity is predicated on some sort of discomfort with the current state of things, otherwise the impetus for creativity would be absent” (215). She explains “suffering” is a natural human condition that can be used in self-healing, resulting in meaningful growth. Research has long revealed evidence that creative participation and self-reflection can be therapeutic and often results in creative novelty and meaningful growth. Therefore, valence is really about balance. Negative emotions provide the “natural counterpoint” (213) to positive emotions, and aspects of wellbeing and creativity rely on both.

2.2.2 Halcyonic Wellbeing

Halcyonic wellbeing refers to a core positive affect/mood, rather than a positive emotion, perceived as the defining element in a state of wellbeing. Halcyonic wellbeing is defined as “the serene and contented acceptance of life ‘as it is’ with no ambitions of acquisition, accomplishment, or progress towards goals” (Gruman and Bors, 2012). Ultimately, this theory argues that there is a form of “in the moment” [contentment] that differs from both hedonic and eudaimonic states (3). Gruman suggests that halcyonic wellbeing is about putting life in perspective and about providing a sort of down time from hedonic and eudemonic wellbeing, which are concerned with actively “doing” and “accomplishing”. Therefore, halcyonic wellbeing is not about focusing on actively pursuing “happiness” in its many forms. He likens it to thinking, “I will not forget there was a time when I did not exist, and there will be a time in the

future when I don't exist...so just breathe deeply and appreciate that I do exist now” (Gruman in Wells 2016). This effortless state of being, away from the active pursuit of goals, is implicit in the idea of *spontaneous cognitive* process of creative thinking (Dietrich 2004, 1019) (see Chapter 3), which occurs through providing a break for the conscious brain from effortful creative thought. The result is that the unconscious part of the brain becomes effortlessly involved in the creative process (Weinschenk 2011). This may also provide the time needed to take a step away from any rigid ways of thinking in order to view goals/challenges from a different perspective. This may lead to insights that are otherwise not possible (Hofstadter 1979, 192-3). This subconscious process may be facilitated in part by “short period[s] of quiet rest [which] can facilitate memory consolidation processes” (Brokaw, et al. 2016, 17). Halcyonic wellbeing would, therefore, contribute to the ability to access the spontaneous cognitive process.

2.2.3 Eudemonic Wellbeing

In contrast to hedonic or halcyonic wellbeing, *eudemonic* (also *eudaimonic*) wellbeing focuses on *personal growth* and *transcendence* as indicators of wellbeing. Ryff (1989) describes ongoing personal growth as a key component of wellbeing, and states that one needs to “continue to grow and expand as a person” and that “openness to new experience” fosters this (34). This concept of the human capacity for meaningful growth as central to wellbeing is central to humanist psychology (Maslow 1993; Rogers 1959) and positive psychology (Lebon 2014; Hefferon 2013). According to Boniwell (2006), eudemony makes reference to “the potentialities of each person, realization of which leads to the greatest fulfillment” (46). Potentialities imply *meaning*, and “[h]umans act toward things on the basis of the meanings they ascribe to those things” (Blumer

1986, 2). In the field of health, Gillet, Andrews, and Savelli (2016) also explain wellbeing as “a meaningful state of life” (3).

A second dimension of eudemonic wellbeing is self-transcendence, a sense of responsibility and connectedness to others, and compassion. As Lebon suggests, self-transcendent values include meaningful relations with others, and contribution towards others (107). Self-transcendence as a factor in wellbeing is evident in research by Shah and Marks (2004), who assert that wellbeing involves a “contribution to community” (2). It is also evident in research by Ryan, Kuhl and Deci (1997) who believe a positive sense of SWB is related to one’s own sense of *autonomy*, *relatedness*, and *competence* within the context of community (708). Further, Ryff (1989) states that psychological growth encompasses six dimensions of wellbeing: *autonomy*, *environmental mastery*, *positive relations with others*, *purpose in life*, *realization of potential*, and *self-acceptance*.

These ideas of growth/self-actualization and self-transcendence naturally lead to the notion that these traits occur in relation to a pro social environment. Ryff’s *environmental mastery* refers to “the ability to choose or create environments suitable to [one’s] psychic conditions...as a characteristic of mental health” (Ryff 1989). This requires a form of mutuality that provides space for sociocultural homeostasis. Damasio (2010) describes sociocultural homeostasis as “created and guided by reflective conscious minds....the deliberate seeking of wellbeing” and dependent on the interaction of the self in a *sociocultural* environment (30). Similarly, Berlin, 1969, takes the position that sociocultural forces play a significant part in wellbeing:

I am not disembodied reason. Nor am I Robinson Crusoe, alone upon his island. It is not only that my material life depends upon interaction with other men, or that I am what I am as a result of social forces, but that some, perhaps all, of my ideas about myself, in

particular my sense of my own moral and social identity, are intelligible only in terms of the social network in which I am (the metaphor must be pressed not too far) an element. (22)

On the whole, then, eudemonic wellbeing is characterized by meaningful self-actualization and self-transcendence within a prosocial/cultural environment.

Another key difference between hedonic and transcendent eudemonic wellbeing is that, as alluded to earlier, pleasure does not play a central role in determining wellbeing (46). Rather, Boniwell writes:

Growth is often an effortful process, involving overcoming challenges and barriers, which can be external or internal. Growth and personal life changes are not always experienced as pleasant. Therefore eudemonic wellbeing encompasses the notion [that] happiness does not naturally equate with wellbeing, rather life satisfaction is nothing more than a congruence between the present and an ideal situation, both of which are a reflection of the person's own subjective appreciation of life. (46)

The descriptions of both hedonic and eudemonic terms involve an acknowledgement that, in some capacity, valence plays a role. In addition, Ryff's idea of *self-acceptance* as a "central feature of mental health" (Ryff 1989, 1071) can be linked to eudemonics since it refers to the ways in which people situate their lives in terms of the past, present and future (having a *time orientation*), and can be illustrated as a self-directed question of assessment, such as "*How am I, the work in process, doing?*" Research shows that the meeting of basic body and mind needs, such as *physiological needs* (e.g., *food, safety,*), and psychological needs (*self-esteem, self-actualization, and self-transcendence*), contribute to a *positive* sense of SWB (Ryan 2009; Maslow 1993; Rogers 1959).

2.2.4 Flourishing and PERMA

Flourishing is a wellbeing theory within the field of positive psychology that, according to

Lebon, deals with investigating “what makes life go well for flourishing human beings” (139). “This raises the questions about, for example, the nature of wellbeing, which is the domain of philosophy rather than psychology” (Lebon, 108). Here, Lebon is emphasizing flourishing as a proactive approach to wellbeing rather than a reactive approach such as that found in many *learned self-regulation* skills and strategies that are undertaken in response to negative feedback (stressors) (Gard, et al. 2014).

Flourishing encompasses the concepts of “growth” and “development” and is subdivided into three dimensions: 1) “mental health/dual continua,” 2) “model mental health spectrum” and 3) “mental health spectrum” (Hefferon, 3). These three concepts encompass important areas of wellbeing, including functional *psychological wellbeing* (Riff’s “self- acceptance, personal growth, purpose in life, environmental mastery, autonomy and positive relations”); *social wellbeing* (“social acceptance, social growth, social contribution, social coherence and social integration”); and *emotional wellbeing* (“positive affect and satisfaction with life”). Hefferon also describes three sets of “core” aspects: “positive emotions, engagement, [and] meaning”. In addition, flourishing entails “three of six additional items”...These are “self-esteem, optimism, resilience, vitality, self-determination and positive relationships” (4-5). Lebon describes the aspects of flourishing as “*objectively valid* virtues and values” rather than characteristics people just “happen to value” (139).

The premise is that in order to *flourish* (Seligman 2011, 13), individuals or collectives need challenges that intrinsically motivate them to act. According to Csikszentmihalyi (1988) the challenge must be just difficult enough that it can be met through determination and persistence that it may contribute to positive personal growth and wellbeing. However, if the challenge out

weighs the resources, then wellbeing is diminished (112-42). Therefore, wellbeing is a dynamic process consisting of challenges, which fuel growth, balanced with periods of calmness (homeostasis) (Damasio, 29-30; Hassed 2002). It is an open cyclic form (inspiration, action, growth, rest...).

A wellbeing theory closely related to flourishing is PERMA, named for five "elements" associated with enhancing wellbeing that are "intrinsically motivating and quantifiably measureable" (6). The elements are 1) *positive emotions* (although happiness and life satisfaction are not the ultimate goal of the theory), 2) *engagement*, 3) relationships, 4) meaning (purpose and belonging in something *beyond* the self), and 5) accomplishment (focus on mastery) (Hefferon 2013, 6).

2.2.5 Somatopsychic Wellbeing

According to Hefferon, "the term *somatopsychic* [*soma=body, psychic=mind*] posits that the body can have a reciprocal effect on the mind...just as the mind (psyche) can influence the body" (6). Harris (1973) writes:

Is it possible that physical activity which stresses the somatic functions can produce a sense of psychological wellbeing and a positive psychological response in much the same way that altering the psychic state can effectively alter the somatic condition in a positive way? (6)

2.2.6 Temporal Wellbeing

Given that wellbeing is a dynamic process consisting of challenges, which fuel growth, balanced with periods homeostasis, we can see that it is a cycle that occurs in time. How individuals manage their time, stress related to time, and their feelings in response to the

use of time available are important indicators of their *temporal wellbeing*. According to Larsson et al., these subjective indicators should be integrated with objective indicators, such as work hours vs. rest hours, to form a conception of temporal wellbeing (1-4). They write:

We argue for the existence of at least two distinct dimensions of temporal wellbeing. One is time pressure and the other is a concept we call time use satisfaction, which has to do with the individual's subjective valuation of how one's time is actually used. (1)

They developed two time-pressure index questions and a single time use satisfaction question:

How often do you experience discomfort due to managing everything that has to be done? (...scale ranging from "Never" to "Always")

How strong are these feelings of discomfort? (...scale ranging from "Barely noticeable" to "Unbearable")

If you think of how your time is divided between e.g. paid work, housework, commuting, sleep, meals, exercise, socializing with family/friends and other leisure time, how satisfied are you then with the actual distribution of your time during a typical week? (...scale ranging from "Very dissatisfied" to "Completely satisfied"). (4)

When individuals manage, comprehend, and find meaning in their use, experience, and navigation of time, this author suggests that they experience *temporal coherence*. That is, their temporal wellbeing is aligned with their sense of self-coherence.

The subjective conceptions of wellbeing thus far account for the "personal (experiential) and social (contextual)" dimensions of an *individual-self* and *social-self* that "moderate[s] the pathway to psychological wellbeing...and explain[s] underlying processes..." (Sharma and Sharma 2010, 130). Sharma and Sharma emphasize that this approach can be understood as an aim to account for "physical, mental, social, and environmental status" (120). The conception of

individual wellbeing in terms of dimensions of selfhood has also been explained by the WHO. The organization expresses that health includes not only physical but “psychological health, social, and spiritual wellbeing” (in Sharma and Sharma, 120).

These multiple aspects of the self-system can serve to counter reductionist definitions, for example, those associated solely with politics, socio-economics, or medical science. This is critical in facilitating SCWB.

2.3 FREEDOMS, RESOURCES AND PROVISIONS

All of the contributors and indicators of wellbeing discussed thus far are contingent on freedoms, resources, and provisions available to individuals and groups whose wellbeing is in question. This has been a growing concern of researchers interested in wellbeing as it relates to human rights.

2.3.1 Capabilities and Functionings

Sen asserts that it is not wealth (metric/utilitarian indicators of wellbeing), but rather, an individual’s critical examination of their *functionings* and *capabilities* in relation to their *agency* that is the essence of wellbeing. To begin with, Sen’s concept of *capabilities* refers to what we are capable of achieving, motivated to be capable of achieving, or the accessibility of resources that facilitate the capability of achieving. *Functionings* are the outcomes of *capabilities*.

Functionings are “states of being and doing” and range from “survival, relationships, to self-direction” (Sen 2009, 231); e.g., being fed and sheltered, having good friendships, having an education, being creative, etc. Functionings also refer to what is done with capabilities; e.g., social activism, caregiving, teaching, music making, etc. Pattanaik (1997) describes these as

cultural indicators “that seek to capture achievements...with respect to functionings,” categorizing them as “*political, social, intellectual and aesthetic* functionings” (12). Capabilities also refers to the freedoms and opportunities needed to achieve functionings, including the freedom to do or be something people “may value doing or being” (232). Functionings are achievements that are born of capabilities. Sen asserts individuals need *critical agencies (voices)* in order to examine their own choices in relation to their functionings and capabilities.

2.3.2 Critical Agency

Critical agency refers to the change that occurs as a result of having the ability to act on self-determined values. This entails even questioning one’s own values and beliefs in making mindful decisions. For example, Sen and Drèze (2002) use the plight of women in India as an illustration stating:

Indeed, the agency of women can never be adequately free if traditionally discriminatory values remain unexamined and unscrutinised. While values may be culturally influenced (we have provided some evidence corroborating this presumption), it is possible to overcome the barriers of inequality imposed by tradition through greater freedom to question, doubt, and—if convinced—reject.(274)

Sen’s concept of critical voice demands an individual take a new perspective, in order to question his or her own logic, beliefs, and values. This perspective is a move from

Therefore, agency is critical in assessing one's capabilities and any economic, social, or political barriers to one's achieving freedoms. “The freedom to question and reassess” [and the] “freedom to act...[situate] critical agency [is a] great ally of development” (274). Blundun (2004)

summarizes Sen's concept of critical voice as "*instrumental*, in that it is needed in order to sustain the other elements of wellbeing, and *constitutive*, in that only the person with critical voice is truly free" (6).

2.3.3 Freedoms and Rights

As suggested freedom facilitates self-determination, providing an essential component of wellbeing. Freedom has been argued to involve the concepts of *negative* and *positive freedom*. Positive freedom is understood as freedom to draw on one's full capacities in being self-determined, even if this means measures be taken to provide resources that ensure this. Negative freedom refers to freedom from internal and external limitations to one's ability to be fully self-determined (Berlin 1969). An internal restriction to freedom could include maladaptive behaviours associated with dysregulation, e.g., *seeking* or *greed* (Schumaker 2004; Panskeep 1988), which restricts intrinsic motivation, whereas an external restriction may be the consequence associated with an imbalanced economically-based culture that reduces human capacity to a utilitarian means to an end rather than facilitating full scope capacities as an end unto itself (Fukuda-Parr 2013; UNESCO 1993).

It has been suggested that together, positive and negative freedom ensure an individual is both free to be self-determined as well as being provided the resources needed to facilitate this. It has been argued that neoliberal freedom is aligned with negative freedom; that is, freedom by intervention which takes from one and gives to another (e.g., social spending) thereby reducing the original owner's ability to be self-determined (Powell 2012). However, when one considers socio-cultural homeostasis as an integral component of individual SWB, then it is necessary that the wellbeing of others be facilitated.

Human rights organizations highlight specific rights and freedoms that can contribute to positive SWB. These rights include basic needs, human dignity, the freedom to reason, autonomy, equality, and the development of capabilities (Langlois 2013, 17-18). Capabilities are addressed in the Universal Declaration of Human Rights, which reads, “Article 26: (2) Education shall be directed to the full development of the human personality and to the strengthening for human rights and fundamental freedoms...Article 27: (1) Everyone has the right to freely participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits...Article 29: (1) Everyone has duties to the community in which alone the free and full development of his personality is possible” (United Nations 2013, 400-1).

Part 1, Article 1 of the International Covenant on Civil and Political Rights reads, “All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development” (403). In terms of associating freedom with human development, Sen (1999) writes, development is “dependent on the free agency of people” and that any measure of “progress should be made in terms of whether the freedoms of peoples are enhanced” (4). Furthermore, Sen (1999) suggests,

Focusing on human freedoms contrasts with narrower views of development, such as identifying development with the growth of the gross national product, or with the rise in personal incomes, or with industrialization, or with technological advance, or with social modernization. (3)

When considering potential barriers to freedom, and thus to wellbeing, concerns may include how “place and space,” “ecology,” and fund allocation towards specific outcomes affects wellbeing (Gillett, Andrews and Savelli 2016, 4).

2.3.4 Autonomy

Autonomy (also referred to as *individualism*, *self-governance*, *self-determination*, *self-regulation*) refers to the independent governing of the self or collective. This independent governance, according to Phillips (1991) refers to the ability to be “self-regulating and progressively self-liberating” within the “universal scope of human experiences,” influenced by “biological” underpinnings. It encompasses the idea that “knowledge” acquisition as well as “moral” choices should be autonomous activities. Autonomy facilitates humans in the pursuit of their “identity” (46).

Ryff (1989) explains this as a self-direction or self-determination, a “regulation from within...according to personal standards” that can be expressed as a “resistance to enculturation”...or assertion of “individualism”. Ryff describes how autonomy involves individualism:

Individualism is seen to involve a deliverance from convention, in which the person no longer clings to the collective fears, beliefs, and laws of the masses.... freedom from the norms governing everyday life. (1071)

Langlois (2013) writes:

The self-directed or self-authored life is considered to be the human ideal. Autonomy and choice are the fundamental ingredients in any valuable life, and rights are derived from the conditions (the liberties and freedoms) that are needed in order to sustain such a life. (18)

This suggests that certain positive and negative freedoms have a role to play in facilitating autonomy, self-determination, and self-assessment, and ultimately identity, and that even though individuals have the capacity for autonomy, this does not mean the external provisions that foster and facilitate it are present.

There are external factors to consider, such as political and social climate, when researching autonomy. Roemmich et al. (2012), describing the freedom to choose, writes, “Choice promotes the experience of autonomy, which enhances intrinsic motivation” (1). Crawford (2015) criticizes this emphasis on individual freedom of choice, writing that the “resolutely individualistic understanding of freedom and rationality we have inherited from the liberal tradition disarms the critical faculties we need most in order to grapple with the large scale societal pressures we now face” (18). The argument that the assemblage of reason-choice-freedom-autonomy are necessary and “sacred” under the prevailing neoliberal notion of what it means to be free because it “doesn’t describe our situation well...[in which choice] has become the subject of social engineering” (18). Crawford instead asserts, “free will is an illusion” (22), explaining “we find ourselves within a world not of our own making” and that only through constraints of culture and the natural world do we have a sense of “agency.” Therefore, he suggests the term agency rather than the terms freedom or autonomy as better describing reality (26-7). Similarly, McRanor (2006) asserts, “considerations of identity provide powerful reasons for tying people’s autonomy-interest to their culture” (60).

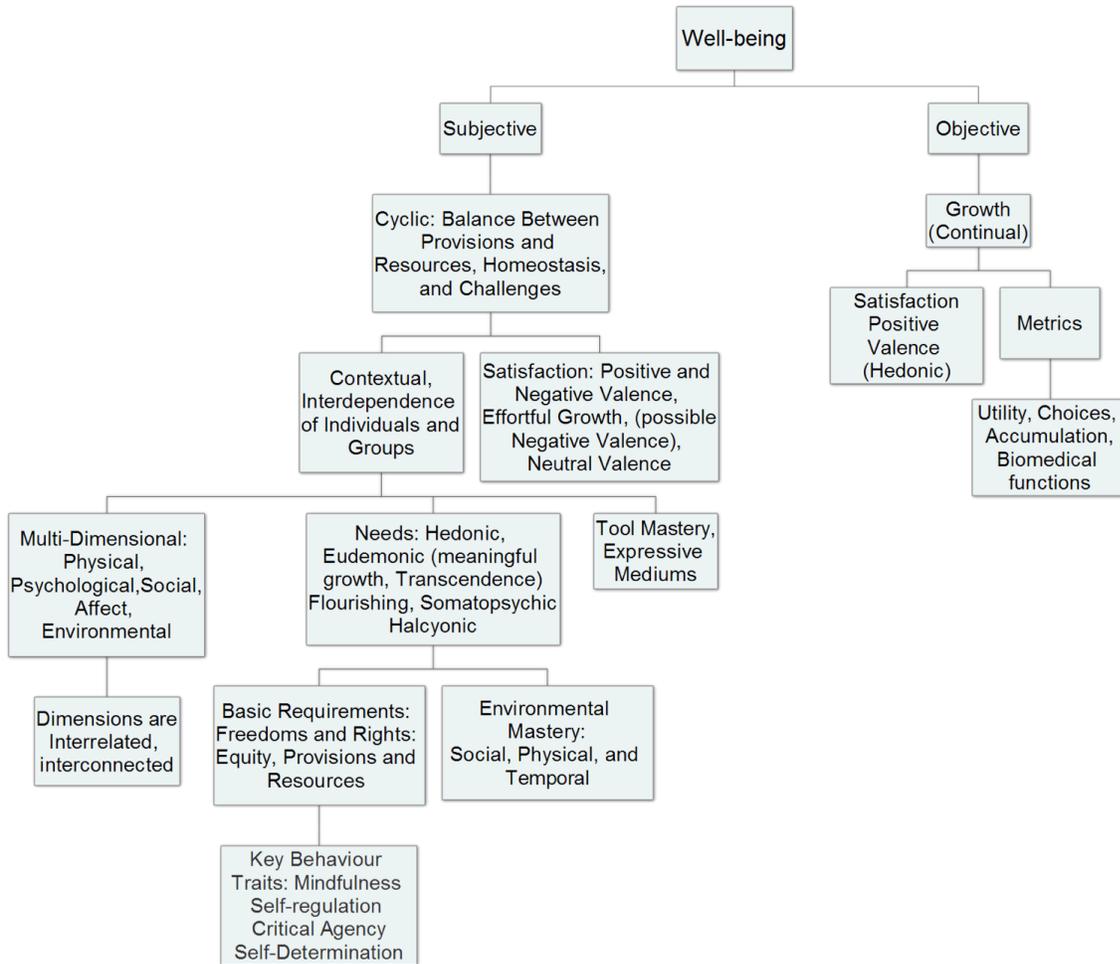
Within this dissertation the term autonomy will be conceived of as analogous to Crawford’s conception of agency in order to ensure that the self-system be situated within the real world and within the shared framework of cultures, the framework for agency. This ensures consideration be given to the many system components of SCWB when discussions take place regarding individuals and creativity.

2.4 CREATIVE WELLBEING

The indicators of and environments for subjective wellbeing discussed here will be used as a basis for establishing a definition of creative wellbeing. Subjective indicators are measurable both subjectively and objectively and they account for a greater range of phenomena than objective conceptions of wellbeing do. The subjective indicators of wellbeing that will be used for the present model of SCWB include: life satisfaction/balanced valance, opportunity, meaningful growth, critical agency, self-transcendence, balance of homeostasis and effortful growth, being present, self- and other-acceptance, embodiment (extended cognition, somatopsychic), pro social environment (place, space, ecology, culture), human rights and freedoms (provisions, resources, contextual, self-determination). In the following chapters, these experiential concepts/aspects of subjective wellbeing summarized in this chapter will be related to aspects of wellbeing intrinsic to culture-based creativity. In addition, any aspects of creativity that are discovered to be contributors to wellbeing not accounted for in this present discussion will be added. Thus far, *subjective creative wellbeing* (SCWB) has the following experiential characteristics: a state of having a *subjectively meaningful creative life* in which there is a balance between resources and challenges, interdependence with others, effortful growth and satisfaction, and freedom and critical agency, and the opportunity for full-scope capability, psychophysiological, and psychosocial wellbeing.

A summary of general characteristics of subjective and objective wellbeing that will provide a foundational reference to the discussions in the preceding chapters is shown in Figure 2.

Figure 2. General Characteristics of Subjective and Objective Wellbeing



3. CREATIVITY

Arriving at a conception of Subjective Creative Wellbeing (SCWBC) begins with an examination of the term *creativity*. Creativity, once seen as an elusive, romantic concept, is now being conceived of more tangibly, and many seem keen to harness this knowledge. Recently, creativity has become a common buzzword in strategic plans, mission statements, and curricula everywhere, but the definition of *creativity* in these contexts can often be narrow, fragmented, and, as explained in Chapter 1, generally confined to a "commercially useful" understanding of the term. This mining of the term has many shortcomings that often result in inequalities to people and in negative consequences arising from that inequality. This author asserts that the critical interrelation between creativity and wellbeing is often omitted in these understandings, yet wellbeing is an intrinsic component of creativity with enormous value to humanity. This author agrees with Gauntlette (2013) that the intrinsic value of creativity is that it is “man’s ultimate resource...[It] arises not exclusively in individuals or in culture, but in the interaction between the two” (5). Maslow (1993) also believed that wellbeing was among the most important "determinants of creativeness”:

That is, anything that will help the person to move in the direction of psychological health or fuller humanness....This more fully human, healthier person, would then, epiphenomenally, generate and spark of dozens, hundreds and millions of differences in behaving, experiencing and perceiving, communicating, teaching, working, etc., which would all be more creative. (71)

It is widely accepted that creativity is multifaceted and has both individual and social underpinnings; it is a social construct. Decision-makers and participants calling upon the term *creativity* must conceive of complex plural dimensions of creativity as a system, rather than mining the term for convenient aspects that align with a particular view or merely accepting an ever-narrowing definition of the term. Such incomplete understandings or transmissions of the

term creativity will be explored throughout this dissertation because such practices may undermine creative wellbeing.

There are literally hundreds of working definitions, which make a single, concise definition virtually impossible (Treffinger, et al. 2002, vii), and for the purposes of this research, unnecessary and even harmful to creative wellbeing. Rhodes (1961), who set out to find a single definition of the word after collecting over fifty definitions said, “As I inspected my collection I observed that the definitions are not mutually exclusive... They overlap and intertwine” (307). Rhodes was being confronted by creativity as a system, a social construct which could not be bound by any one definition, lest essential elements be forgotten. However, over decades of research, common areas of overlap have generated some consensus regarding factors that should be included in a working model of creativity. Domain skills, motivation, awareness, attention focus, openness, cognitive fluency and flexibility, rationality and intuition, self-acceptance, self-esteem, etc. (see Appendix C for a more complete list).

Creativity research has also yielded several models. Decortis and Lentini (2009) describe the *creative cycle* as “inspiration, exploration, production, and sharing” (3). An important aspect of this cyclic model is that it underscores the relevance of sharing ideas, a crucial indicator of creative wellbeing. Wallis’s model of creative thinking involves “preparation, illumination, incubation, verification” (1926). Isaksen and Trefflinger (1985) assert that a creative problem solving model includes “objective finding, fact-finding, problem finding, idea finding, solution finding, [and] acceptance finding” (35).

3.1 CREATIVITY AS A SYSTEM

The multi-disciplinary interest in creativity has resulted in a broad range of research pointing to creativity as a system in which multiple components are interrelated and interdependent. Inspired by Rhodes' example, this chapter provides a synopsis of ideas involved in creativity as a system in order that discussions around SCWB are underpinned by this knowledge.

3.1.1 Conceptions of the Creative Process

As has been pointed out, much research on creativity focuses on the creative process as a collective of internal and external factors associated with a communicable outcome (which may include the process itself), seen as useful for an individual or group within a given framework. Outcomes vary among creative processes within domains and between individuals and, in turn, these outcomes continually reshape the process itself in a reciprocal relationship. Since the 1950s, conceptions of the creative process have changed significantly.

3.1.1.1 CPS: Creative Problem-solving

One view of creative process is that it is a vehicle for *problem solving*. Osborne, in his 1963 book, *Applied Imagination: Principles and Procedures of Creative Problem-Solving*, was inspired by the belief, contrary to popular notions of the time, that individuals were not simply born creative or not creative. Rather, his research led him to believe creativity could be learned, through effort, and that everyone had the potential to be creative. Osborne wrote:

Scientific tests for aptitudes have revealed the relative universality of creative potential. The Human Engineering Laboratories analyzed the talents of large groups of rank-and-file mechanics and found that two thirds of these rated above average in creative capacity. An analysis of almost all the psychological tests ever made points to the conclusion that creative talent is normally distributed—that all of us possess this talent to

a lesser or greater degree—and that our creative efficacy varies more in ratio to our output of mental energy than in ratio to our inborn talent. (15)

This belief was made explicit in his formation of a Creative Problem Solving (CPS) process model that outlined how to foster what he viewed as *creativity*; that is, novel or useful ideas and outcomes. The term *problem* referred to the discrepancy between the now and the goal, or between predicament and opportunity. The term *solving* referred to taking deliberate action through creative thinking towards the solution to the problem (15).

Since Osborne's book was written, CPS has been researched extensively and has evolved. Subsequent views commonly conceive CPS as having three main phases, described by Mintzberg, Duru and Theoret (1976) as *identification* (knowledge of a problem), *development* (finding ways to solutions), and *selection* (deciding on a particular solution) (246-7). Torrance, a central figure in early creativity research, added meta-awareness to CPS skills, stating that creativity was:

a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficulty; searching for solutions, making guesses, or formulating hypotheses about the deficiencies...(1966, 6)

3.1.1.2 Social and Cyclical Creative Process

The next major development added an explicit social dimension and posited a cyclic process, particularly with regard to shared cultural knowledge for intelligible communication of ideas (discussed further in Chapter 5). Decortis and Lentini (2009) write that Vygotsky conceived of creativity as,

a cumulative historic process in which every shape to come is conditioned by the previous ones. So any creation, even individual, always includes a social coefficient. In this sense, it will never be possible to have a strictly personal invention; it will always wear something of the anonymous collaboration of the others. (2)

Decortis and Lentini expanded this idea to involve four interdependent phases, termed *exploration, inspiration, production* and *sharing* (3). This theory is similar to CPS, but here, creativity is conceived as fluid, dynamic, and changing over time based on a shared knowledge. Exploration describes free or guided, direct or mediated, multi-sensory or analytic, experiences of the world and comparison with others' experience of the same experiences in order to form a personal, novel representation. Production refers to the representation of the idea through a medium. Sharing refers to the communication of the idea infused in the product with others, thus inspiring others and completing the cycle (3-4). Importantly, implicit in this process is the connection and responsibility to culture and its members in facilitating SCWB.

Similarly, Amabile (1998) posited a social dimension to the creative process, but from a behavioural point of view. She asserted that it requires: 1) *expertise* (“technical, procedural, and intellectual knowledge”), 2) *creative thinking* (“perseverance,” “flexibility” and “imagination” related to problem solving), and 3) (intrinsic) *motivation* (19). Amabile's contribution lies in the personal and social benefits intrinsic to the type of cognition, knowledge, motivation, self-regulation associated with the creative process within a given domain (20).

3.1.1.3 NUP: Novelty, Utility and Product

Focusing more closely again on the outcome phase of creativity, Andreasen (2005) asserted that three components were important in defining creativity: *novelty, utility* and *product* (NUP).

Novelty (which we may also call “originality”) involves “new ways in perceiving relationships, ways of observing, and ways of portraying.” Utility is the component that “evokes emotions, inspires and gives the audience a sense of awe of what one can achieve.” The third component,

product, relates to “the creation of something” (17). Sternberg (2006) also suggests that novelty is central to creativity and “involves thinking that is aimed at producing ideas or products that are relatively novel and that are, in some respect, compelling” (2). Using music as an example, Odena (2012) writes, “A working definition of musical creativity may be explained as the development of a musical product that is novel for the individual and useful for the situated musical practice” (203). Like Amabile, Odena adds a contextual dimension to the discussion.

There is an agreement among some researchers that there are scales of NUP, or ideas ranging from what is novel for an individual to that which is culture-changing. Some authors differentiate between what is usually termed “little-c” and “Big-C” creativity. For example, learning to navigate the harmony of a standard musical piece while improvising may be a novel outcome for an individual and represent small-c creativity. Big-C creativity is culture changing, for example, Einstein’s innovative Theory of Relativity. Kaufman and Beghetto (2009) posit a “Four C” model of creativity that accounts for these various scopes, writing, “We argue that the Four C model allows us to consider creative ability, interest, and pursuits at an appropriate level of specificity. Mini-c refers to transformative learning, involving personally meaningful interpretations of experiences, actions and insights,” Little-c refers to everyday problem solving and creative expression, Pro-C refers to the creativity expressed by creative professionals, and Big-C refers to culture-changing creativity within a field (10).

3.1.1.4 Wellbeing as a Transformative Creative and Heuristic Experience

A more humanist-psychological view refers to the importance of the creative process as an end itself, such as in therapy and wellbeing. This research takes the view that the creative process is not valuable simply because of the novel idea or object it produces; it is valuable in its own right.

The idea of growth, evolution, or transformation is considered to be an intrinsic part of the process, perhaps most easily recognizable in a novel product but also visible throughout the process. A 2009 report for the European Commission, *The Impact of Culture on Creativity* states that creativity, traditionally used as a form of problem solving, should be “first and foremost a quest, a risk, a sketch, an approach rather than a solution” (31).

Gabora (2011) describes creativity as “arising from the self-mending capacity of an internal model of the world, or worldview” (1). That is, she looks at creativity as dependent on the development of the self:

[I]ll-defined...ideas and issues...become...defined...by considering different viewpoints and contexts during the creative process....[E]lements of a body of knowledge modify each other to solve problems, reduce dissonance, or accommodate unexpected events. Like other complex systems, a worldview self-organizes into a critical state between order and chaos in which a small perturbation occasionally exerts a disproportionately large effect, a phenomenon known as self-organized criticality. (1)

Understanding the self in relation to the world is described as “heuristic research” by Moustakas (1990). It is reminiscent of CPS, but it places the internal, intrinsically-motivated self at the centre of inquiry:

[H]euristic research begins with the question that needs to be illuminated or answered. The question is one that has been a personal challenge and puzzlement in the search to understand one’s self and the world in which one lives...The heuristic process is autobiographic, yet with virtually every question that matters personally there is also a social—and perhaps universal—significance...[The process includes] identifying with the focus of inquiry, self-dialogue, tacit knowing, intuition, indwelling, focusing, and the internal frame of reference...a way of self-inquiry and dialogue with others aimed at finding the underlying meanings of important human experiences. (15-17)

Therefore, heuristic self-learning is indicative of balanced cognitive, affective, psychomotor development, via problem solving and self-expression approaches to inquire. This is analogous to the need for a self-motivated and self-directed creative practice and understanding of the self

in relation to the world and implies a conscious effort towards socio-cultural homeostasis as an indicator of psychological and physiological wellbeing, including SCWB.

In addition, personal homeostasis is impacted by the relationship between the self and the external cultural environment. Damasio (2010) underscores this fact stating, “The investigation of sociocultural homeostasis can be informed by psychology and neuroscience, but the native space of its phenomena is cultural” (30). He suggests that sociocultural homeostasis is deliberate and evolutionary, “created and guided by reflective conscious minds...the deliberate seeking of wellbeing....[It] is a somewhat fragile work in progress, responsible for much of human drama, folly, and hope” (30-1). Similarly, Freire (1970) believed,

Man’s ontological vocation ...is to be a subject who acts upon and transforms his world, and in doing [so] moves [towards] ever new possibilities of fuller and richer life individually and collectively...This world to which he relates is not a static and closed order, a given reality which man must accept and to which he must adjust; rather it is a problem to be worked on and solved. (12-13)

Foucault suggested that, “The transformation of one’s self by one’s own knowledge is, I think, something rather close to the aesthetic experience” (Foucault 2005, 49). In fact, he postulated that life is an artistic creation:

What strikes me is the fact that in our society, art has become something, which is related only to objects and not to individuals, or to life. That art is something which is specialized or which is done by experts who are artists. But couldn’t everyone’s life become a work of art? (Foucault 1991, 350)

Damasio (2010) writes, “No less important, art [is] a way to explore one’s own mind and the minds of others, a means to rehearse specific aspects of life, and a means to exercise moral judgment and moral action” (222). In these authors' works, we see reflected the interrelationship and interdependence between creativity, self and others, and wellbeing encompassed within related views on heuristic research.

3.1.1.4.1 Basic Needs and Creativity

Maslow devoted much of his research to understanding the relationship between the self, creativity, and wellbeing, emphasizing that meeting *basic motivational needs* was key to any idea of wellbeing (see Chapter 6, *Motivation*). His understanding of creativity “was as much about people’s wellbeing as it was [about] creative products” (Vorhauser-Smith 2011). Maslow (1993) believed, “Education-Through-Art may be especially important not so much as for turning out artists or art products but for turning out better people” (55).

Relevant needs from Maslow’s hierarchy are self-esteem, self-actualization, and self-transcendence. First, attaining *self-esteem* is to achieve self-respect stemming from “capacity,” “achievement” and “respect from others.” Self-esteem facilitates a sense of “independence and freedom” (381). The skillful use of a ‘tool’ can facilitate agency and self-esteem. That sense of freedom and self-endorsed competency is required for creativity. Next, Maslow links *self-actualization* to creativity. It refers to self-fulfilling endeavors which result in becoming “more and more” of what one is and is capable of over one’s lifetime. He wrote:

Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. (382)

Maslow believed self-actualization facilitated creative people’s being “autonomous and courageous,” able to overcome “fears” of the “rigid pressures of society” (383).

Finally, according to Maslow (1993), the highest basic need, *self-transcendence*, can be connected with the creative process. Self-transcendence refers to the “sense of loss of self-consciousness, of self-awareness, and of self-observance...it is the type of self-forgetfulness

which comes from getting absorbed, fascinated, concentrated...on something outside of one's own psyche...[situating the needs of beings and systems outside oneself] so they become intrinsic to the self itself" (259). As will be discussed in Chapter 7, this is encompassed within the idea of self-regulation, an important component of SCWB.

Maslow also believed that the ability to transcend one's culture and one's ego was part of self-transcendence. Transcending culture allows for detached critical observation. This facilitates the understanding of one's attitudes towards, acceptance of, or rejection of one's cultural values, beliefs, norms or practices. This implies that cultural participation of self-transcendent individuals rests on conscious decision-making rather than blind faith. Self-transcendence refers to the ability to free the self from all sorts of bondage, including ideological cultural slavery or being constrained by the opinions of others or by ego. These types of constraints are known to be detrimental to creativity, as will be shown later. Self-transcendence, according to Maslow, also refers to transcending selfishness in order to live with humility and "in harmony with extrapsychic...reality." This reality includes "causes, duties, responsibility to others and the [natural] world" (261), i.e., critical citizenship. "Transcendence refers to the very highest and most inclusive or holistic levels of human consciousness. Behaving and relating, as ends rather than means, to one's self, to significant others, to human beings in general, to other species, to nature and to the cosmos" (269). Finally, Maslow predicts, "We shall call people who are satisfied in these needs, basically satisfied people, and it is from these that we may expect the fullest (and healthiest) creativeness" (1943, 383).

3.1.1.4.2 Aesthetic Learning and Wellbeing

Another link between creativity and wellbeing involves *aesthetic learning*, which refers to a self-directed, relational, transformative process fostered through the interaction, or “aesthetically mediating meeting,” between the self and the surrounding environment, including the creation and observation of specific objects and ideas (Austring and Sørensen 2012, 90). “Impressions” perceived through this engagement are “reflected” upon and transformed into expressions “in order to communicate about” the self, the world, and the self as it is situated in the world (Austring and Sørensen 2010).

According to Rasmussen, aesthetic learning refers to “the experience of understanding; an entirety of emotionality and rationality” (Rasmussen 1990 in Austring and Sørensen 2010). This endows experience with the ingredients needed in critical agency, “giving life meaning and entirety” (Hansjörg 1996). Aesthetic learning fosters a balance between “inner life and outer world... individual and cultural identity,” as well as between wellbeing and “creativity, society’s most important resources” (Austring and Sørensen 2010). Crawford asserts that aesthetic engagements require “*skilled practices*... establish[ing] narrow and highly structured patterns of attention—what I shall call ecologies of attention—that can give coherence to our mental lives, however briefly” (23).

Multi-sensory perceptual learning (see also Chapter 6) underpins apprehension of oneself in a world beyond one’s own head. Thus it underpins aesthetic learning in the same way that a “sensorimotor account of vision and vision consciousness” enriches a visual experience and the ensuing memory of it (Noe and O’Regan 2001). Individuals gain perspective through “self-motion...moving or changing through time” (Crawford, 263). Crawford describes the skilled use

of objects (e.g., the arts) as crucial in self-consciousness and wellbeing, calling the relationship an “entanglement of action and perception.” The object and body form a “*closed loop*...between action and perception...what you perceive is determined by what you do, just as when we make use of our hands.” Further, he suggests that becoming skilled at something within a shared framework is essential for self-actualization and self-transcendence (47). Learning by doing, as is common in mentorship within arts domains, illustrates that “our embodiment and the possibility of movement our bodies provide are no mere accessory to perception, but rather constitutive of the way we perceive” (48) (see also Embodied Cognition in Chapter 4).

A key difference between embodied cognition and aesthetic learning is asserted to be that the first is perceptual and pre-symbolic, while the latter transforms impressionistic experiences to symbolic representations and expressions (Austriug and Sørensen); i.e., a mindful mode of action. However, this implies that aesthetic learning is inextricably linked to embodied cognition. As will be explained further in Chapter 5, cultural representations and practices provide the constraints for communicable (including ineffable) aesthetic experiences, or agency. Discursive learning has been argued to differ from aesthetic learning in that it is underpinned by stable linguistic symbols, e.g., $3+5=8$, no matter what the context, while aesthetics is underpinned by self-reflective subjective experience; i.e., the experience differs between individuals or groups. This is not to say discursive thought is absent from aesthetic learning. Psychological processes involved in creative thinking involve the whole continuum of cognition from rational to emotional (Dietrich 2004). Perhaps then it is useful to conceive aesthetics as Johnson (2007) does, as “the study of everything that goes into human capacity to make and experience meaning” (x). Creative practices such as the arts are underpinned by such a holistic approach to

meaning making through, for example, mind-body-tool-environment closed loop, self-other-reflection, reason, emotion, context, experience, and symbolic representation.

Crawford worries that the trend in education towards increasing online learning results in a “disembodied nature of...curriculum, which divorces the articulate content of knowledge from the pragmatic setting in which its value becomes apparent” (256). This claim is supported by research pointing to the need for experiential, multi-sensory perceptual learning that is accomplished most effectively face to face (see Chapter 6, pages 193-99), and by studies showing that our subjective/emotional thoughts give rise to the motivational attention needed to pursue, persist, and persevere in skill development (see also valence, mirror neurons, and intrinsic motivation in Chapter 6). Crawford asserts that virtual representations of things in the real world “flatten” experience, removing the subjective, replacing it with objective “representations” of reality and hence eliminating the motivational cues (see Chapter 6) needed to draw us out from our heads to engage with the external world. Limiting knowledge to the objective results in learners being “cut off from identifiable, responsible sources of authority outside of [themselves]” (205). The “nuances of considered opinions” of mentors are replaced by “normative beliefs of institutions” (203). This *cultural disembedding* results in not only diminished autonomy but also in isolation and self-incoherence (see Chapter 5 for a further discussion of social constructionism).

However, aesthetic learning, as explained, unites cognition, affect, and self-regulation, dimensions critical to creative thinking and linked to wellbeing. Dissanayake explains there are five *operations* connected to aesthetic learning which she terms *repetition*, *formalization*, *dynamic variation*, *exaggeration*, and *surprise* (793-4). She suggests the “mindful routine use...

of the five aesthetic operations has...far reaching benefits... for all cultures, and through time” (794). The benefits include “a sense of *mutuality*, a sense of *belonging*, a sense of *competence*, a sense of *meaning*, a sense of *ratifying*.” *Mutuality* refers to a self-determined “closeness with others.” *Belonging* refers to self-determined “identity as a member of a group.” Competence refers to self-determined sense of importance in doing or learning “here, socially, physically, cognitively.” *Meaning* refers to the self-determined giving of “value and purpose to what has been done in the past, what is happening now, and what could happen in the future.” *Artifying* refers to “a regard for life and the caring about important things by making the ordinary special and the invisible visible” (794). Similarly, Pinciotti, Gorton and Brown (2009) discuss the benefits of mindful routine use of the five aesthetic operations as follows:

awakens the senses, focuses attention, and engages each learner in a perceptually rich and visually cohesive learning space...awakens...[individuals]...to the patterns and uniqueness of each other and the world around them...awakens a sense of belonging, mutuality, meaning, competence, and a caring about important things...awakens and reinforces the unique role the arts play in development, learning, and sense of well being. (6)

In sum, aesthetic learning facilitates what Foucault called “the work on the self” (62). This occurs within a complex interaction between the self and shared cultural frameworks, society, and the natural world. The self is constantly evolving, interacting with, re-enforcing, and challenging the information from its social environment and natural world. This dynamic interaction occurs in order to find meaning, place and purpose, and certain circumstances facilitate this dynamism. The Canadian Commission for UNESCO (2005) discusses the “intrinsic value of arts education” in Canada, enumerating its subjective benefits:

- Connects the heart and the mind
- Offers a connection to the intuitive and transcendent
- Addresses the body, the spirit and the intellect as one
- Develops the whole person
- Helps us find our voice and our identity

- Teaches individuals to become artists, helping them to "create" their lives by acquiring and using observational, analytical and technical skills (UNESCO 2005)

Therefore, SCWB views creativity, in part, as an indicator of a flourishing life in a critical citizen. This view reflects the recent research into critical thinking, whereby knowledge is not limited to use in logic, reasoning, argument and judgement, but also includes the development of learners, through critical pedagogy, as critical citizens. Critical thinking involves questioning accepted knowledge and uncovering concealed meanings about, for example, who knowledge really serves (Davies and Barnett 2015), which can inform social justice activism. This type of critical/creative thought involves skills, behaviours, and states towards human centered progress, inextricably linking all systems and dimensions of SCWB to the cognitive process. This type of critical/creative cognition requires cognitive freedom.

Aesthetic learning, heuristic research and critical thought as vehicles for fostering critical citizenship, is first and foremost aided by an absence of external control. Freedom from external control provides space for encountering and considering subjective, alternate approaches to living life, and it allows personal growth to occur as a “free-floating practice in complex interaction with the changes of modernity itself” (51). This freedom from external control is required for creativity to occur. Chomsky stated, during a 1960 BBC television debate, that a “fundamental element of human nature is a need for creative work, or creative inquiry, or free creation without arbitrary limiting effects of coercive institutions...a decent society should maximize the possibilities for this fundamental human characteristic to be realized” (in Wyclef 2000) (For further discussion see 5.5.4.3 Social Memory and Values). This concept of freedom,

one that serves creativity and wellbeing, is at odds with the neoliberal ideas of freedom as self-reliance and utility.

3.1.1.5 Creativity as a Commodity

Arguably the most popular notion of creativity in Western media and public policy in the 21st century is creativity through the lens of financial rhetoric and economic policy, which is largely concerned with the creative process as utilitarian, culminating in rewards (Florida 2002, Conference Board of Canada 2008). In this creative process, the main motivational incentive is extrinsic, in tangible or psychological form. Common extrinsic rewards are wealth, awards, status, and attention. As will be discussed in Chapter 6 on motivation, once the most basic human needs are met, extrinsic rewards tend to undermine SCWB and creativity in general. By definition, the commodification of creativity within a market system forces the participant to contain their process and outcomes within limited and externally defined views of value and “success.” Given the trend to commoditize post-secondary research, this is troubling. This is because the use of market system policies and decisions “selectively legitimizes and includes certain knowledge but degrades and marginalizes other-often qualitative knowledge” (Gillett, Andrews and Savelli 2016, 8). Another problem with this trend is that the pursuit of intellectual property rights by institution and business partners limits access and sharing of creative ideas essential in the creative process. This practice fosters a climate that is “against collaboration and information-sharing among researchers....Excessive copyright terms harm the quality of the “arts system by keeping [art] out of the hands of the public” (Ivey 2009, 187). Therefore, commodification marginalizes many, hijacks intrinsic motivation, disempowers a culture of sharing and collaboration, and does not assign use value to the creative process. As a result, it has detrimental effects to creative wellbeing.

Some argue that by commoditizing and mass marketing creative goods and ideas, benefits will come in the form of ‘trickle down’ creative opportunities. The belief is that massification, producing more goods, ensures the sustainability of local creative practices; however, as Jean-Benghozi states, the reality is that there is a reduction of the actual works made available to the public:

[C]ulture is caught up in a vicious circle: economies of scale and the massification of distribution encourage the development of promotional and commercial campaigns that favour the most well-heeled producers and products that target the broadest markets, further reinforcing the trivialization and standardization of products, even when they are grounded in a specific cultural mould. (Jean-Benghozi 2003)

Unfortunately, the “conformity” it relies on are considered to be a “solution” to the “anxieties” of individualism. This is regrettable because the self-acceptance, self-endorsed competence, agency, self-actualization, freedom, openness, risk taking, non-conforming behaviour needed in skill development and related creativity are subdued as a consequence.

3.2 COGNITIVE COMPONENTS OF CREATIVITY

Having explored conceptions of creativity and the creative process, it is important to discuss cognitive components of creativity. Creative thought involves a range of normal yet complex intellectual patterns involving “widespread [and hierarchical] circuits throughout the brain” (Carson 2010, 45). These circuits do not work alone and often work towards specific processing outcomes as “centers” (46). Dietrich (2004) asserts there are two overarching and “distinct neural structures” related to creative thought that he distinguishes as “cognition and emotion” (1).

Carson (2010) names specific neural centers within these two overarching neural structures as the “*executive, me, judgment, reward, fear, and association*” centers (155-62). The *executive*

center and judgment center refer to the cognition circuit, the space of the working memory, while the *association, reward and fear* centers refer to the *emotion circuit* and contribute to metaphorical and emotional thinking. Insights that involve the association centers are illustrative of *cognitive flexibility*: an ability for “*shifting direction*” of thinking or “*changing point of view*” (Treffinger, et al., 12), and *openness and courage* to exploring *new ideas* or *existing ideas in new and varied ways* (J. Guilford 1950, 12). Carson explains that association centers make it possible for “many highly interconnected” and “distant parts of the brain” to contribute to the creative process, playing a role in “metaphorical” thought, “feeling emotion, learning from new information, visualizing the future,” and “generating ideas.” She calls these centers a “hot spot” for creativity (52-3). According to Dietrich, this neurological understanding of creative thinking should put to rest the idea that creative cognition is simply a “right-brained process” or a “selective brain area process.” In fact, he states that the brain “lights up like a Christmas tree,” indicating activity in multiple brain areas during the creative process (2013). Creative thinking involves both the use of domain expertise and the ability to stand outside the constraints of this knowledge in order to pursue novelty. Therefore, it is critical to understand how knowledge is acquired and placed into memory and to understand how independence of thought, risk-taking and various psychological processes contribute to creativity.

3.2.1 Internal Knowledge Base

Information useful to creative thinking is found in what is termed a *knowledge base*. Dietrich explained that the more knowledge “readily available” to the working memory, the more ideas can be “juggled” at once during creative thinking. This entails both “expertise” and “committing knowledge to memory” (1020).

3.2.1.1 Domain Expertise

A knowledge base is widely distributed across the brain, tied to many types of knowledge (declarative and procedural, implicit and explicit) that is representative of a domain. Over time, this variety contributes positively to fostering a deep internal knowledge base necessary for domain expertise. For example, according to Davenport and Prusak (2005), “Knowledge born of experience recognizes familiar patterns and can make connections between what is happening now and what happened then....Experience provides a historical perspective from which to view and understand new situations and events” (6). In this sense, knowledge acquisition is recursive; knowledge is built on and shaped by previous knowledge.

Researchers such as Amabile, Dietrich, Pressing, Berkowitz, Crawford, and others refer to domain knowledge in their writing. This type of knowledge is shared by cultural members and facilitates efficient and intelligible communication of ideas within a shared framework in much the same way language does (an extensive discussion on shared cultural knowledge is given in Chapter 5). The notion that a cultural framework promotes agency is also expressed by Kornfield (2009) who writes, “Our ideas are created by identification” (63). It is suggested this type of shared knowledge is acquired formally or informally, over time, within a shared domain, and is vital in developing expertise. Formal knowledge acquisition can be acquired face-to-face, as with mentorship or other social interaction within a given culture; through documents or media; or through mind-body-object triangulation (embodied cognition, see Chapter 4).

3.2.1.2 Referents

Pressing (1998) points out that the fluency with which individuals are able to navigate their internal knowledge base is reliant on the process whereby “declarative knowledge (facts) about

procedures are folded in with procedural knowledge, as part of the process of constructed useful generalized motor programs” (53). These generalized motor programs, or referents, are important because they lessen the amount of cognitive processing energy needed to navigate and apply knowledge in real time. For example, Pressing, considering improvisation, writes, “To achieve maximal fluency and coherence, improvisers, when they are performing... ‘absolute’ improvisation, use a *referent*, a set of cognitive perceptual, or emotional structures (constraints) that guide and aid in the production of musical materials” (52).

Berkowitz (2010), who describes improvisation as “spontaneous creativity constrained by conventions and rules” (2) suggests referents provide “the freedom that is at the heart of improvisation” (180). Pressing also asserts the use of a generalized motor program or referent as providing material for innovation, variation, and inspiration “towards something entirely new” (50). In music, a referent could be a typical song form found in the standard jazz repertoire such as the thirty-two bar AABA form, the twelve-bar blues, or even a melodic theme on which more free improvisation can be based. The use of a referent “provides material for variation” (Pressing 52). This is in part what Dietrich was implying when stating knowledge must be both readily available and committed to memory.

Along with economy, referents allow space for cognitive fluency, which describes the degree to which individuals can subconsciously multi-task, or run multiple cognitive processes related to one’s knowledge at once. This involves the *basal ganglia*, a type of “enormous data warehouse... that holds the records of every skill you have acquired, every emotion you regularly experience and every habit, good or bad, you have ever established” (Vorhauser-Smith 2011, 11). While working memory is impeded by conscious attempts at this type of multitasking (and worsens

with the number of tasks undertaken), subconscious programming of these processes, through the use of referents, is affected to a much lesser degree. Creative thinking uses the “controlled” process of the working memory and the “automatic” process (in which referents exist) of other areas of the brain, “but not both at the same time” (Berkowitz, 140). This is important to consider in creative improvising. During improvisation, individuals focus on the overall intent or form of the improvisation rather than on discrete musical components, and the balance between planning and flowing in real time requires a cognitive economy, provided by referents, that allows the mind to focus on overall intent. As Berkowitz concludes, improvisation involves many parts of the brain that 1) “subserve the generation and comprehension of sequences,” 2) “make decisions from competing possibilities,” and 3) “create plans for motor execution of a chosen sequence” (142). Therefore, cognitive efficiency is key to success.

A referent also provides a common ground between performers, requiring less cognitive processing energy to track each other’s parts and roles during real time performance. It also provides a familiar, mutual framework in which to transmit ideas between musician and audience. Pressing asserts that the wide array of cognitive processing involved in music is also an example of the need for fluency and flexibility in areas other than improvising. Pressing points out:

As with the referent, the musical knowledge base is not purely ‘engineered’ by considerations of performance efficiency; it encodes the history of compositional choices and predilections defining an individual’s personal style. Two drives, one towards efficacy of action and one towards artful expression, primarily shape the selection of information and performance recourses in real time, and guide their integration. (54)

For example, sight-reading, memorization of repertoire, and composition, may be “quite independent” parts of the knowledge base, but “overall fluency...[and] adaptability [in other words, flexibility] in changing conditions in real time is the hallmark of expertise” (50).

3.2.1.3 Working Memory

The working memory is responsible for “directing and sustaining attention, retrieving relevant memories, buffering that information and ordering it in space-time, as well as thinking abstractly, considering impact and appropriateness [and then]...orchestrat[ing] action in accordance with internal goals...such as aesthetic or scientific goals” (Dietrich 2004, 1016). According to Dietrich, “Working memory describes the ability to process information online [consciously, in the moment]...It allows holding in mind knowledge that is relevant to solving a particular problem” (1013). Similarly, Treffinger, et al., (2012) show the working memory is involved in “analyzing, synthesizing, classification, evaluation, reorganizing or redefining, seeing relationships, desiring to resolve ambiguity or bringing order to disorder, and preferring complexity or understanding complexity, and integration” (13-15). In terms of creativity, the working memory allows one to select and use relevant information from the knowledge base in the moment and in changing circumstances toward a creative endeavour, such as recalling the compelling colours of the sky last Tuesday when painting a sky today.

The executive center is the seat of the working memory, where the conscious “refining and strengthening” of ideas takes place. It is made up of regions of the prefrontal cortex, medial prefrontal cortex, and orbitofrontal cortex, as well as the anterior cingulate cortex (Carson, 46-7). The executive center “integrates already highly processed information to enable still higher cognitive functions such as a self-construct, self-reflective consciousness, complex social

function, cognitive flexibility, planning, willed action, source memory and theory of mind” (Dietrich 2004, 3). Research related to the brain’s executive center provides a biological explanation for the aspects of creative thinking involving “what you think about” and what “memories” are drawn on during the creative process (Carson, 57) (see also *deliberate creativity* below). It too provides a biological underpinning to the idea of “digging deeper” into ideas and the ability to access and navigate one’s knowledge base.

The expression of ideas that are in development or have been developed relies on another brain center. A brain circuit termed the *judgment center* by Carson, situated between the executive center and other structures in the brain, is responsible for “comparing our actions to internalized standards of behaviour and sends out alarm messages when we’re out of line” (49). This center is helpful towards attaining appropriate domain skill norms, and for evaluating creative ideas. However, it is also associated with impediments to creativity. McGilchrist (2013) believes that when we over-prioritize the narrow focus of our attention (executive center) over the broad focus, broader aspects of the creative process may become fragmented. As well, this emphasis on executive cognitive control can result in a fear center interruption of executive function. For example, fear of risk taking and stage fright outcomes associated with the judgment center (including the self-monitoring system) when not attenuated.

The impediments that the judgment centre places in the way of creative wellbeing are connected to the theory that incongruent implicit/intrinsic and explicit motives lead to ill-being (see Chapter 6). These include motives related to the process of individual and group identity. Social identification is concerned with how we adjust our behaviour to the norms of a particular framework; for example, it accounts for the emotional significance of and effects on self-esteem

that arise from identification with a group. While there may be positive effects, if social identification causes conformity to third party interests that are not in line with one's intrinsic motivation, incongruity and ill-being result. Once we align our self with a particular group, social comparison suggests that self-esteem is also impacted by how the group is perceived in comparison to others. This can fuel prejudice and discrimination (Tajfel 1979). For example, when individuals or groups comprehend that their creative ideas/objects are not deemed valuable by a given society, it can result in feeling that they are not contributing in a meaningful creative way, and lowered self-esteem follows. It can also mean that they are marginalized or discriminated against in terms of extrinsic rewards, such as recognition or being valued as persons.

3.2.1.4 Persistence and Attention

Anders Ericsson's research emphasizes determination, patience, and focus over time that is necessary in developing expertise (including a knowledge base) in a domain. In *Giftedness and the Expert Performance Approach*, Ericsson, Roring and Nandagopal (2007) write:

[There is] compelling evidence for the requirement of engagement in domain-related activities prior to attaining high levels of performance and that even the most 'talented' need 10 years or more of intense involvement before they reach a level where they can consistently demonstrate superior performance...By the age of 20, the most accomplished musicians had spent over 10,000 hours of practice, which is 2500 and 5000 hours more than two less accomplished groups of expert musicians or 8000 hours more than amateur pianists of the same age. (17)

There is wide support for the idea that knowledge is acquired through persistence. For example, Odena's (2012) systematic view of creativity involves explicit and implicit cognitive persistence...hard work...[that is] "underpinned by motivation" over an extended period of time (201). Torrance (1966) emphasized the importance of recognizing and attending to "gaps in

knowledge” in creative thinking (6), and this awareness of one’s knowledge base with reference to a given creative endeavour can only come with cognitive persistence. Similarly, Dietrich’s (2004) research on deliberate cognitive creativity shows that the brain draws on widespread circuitry (stored memories, knowledge, information) during effortful creative thinking, and that creative insight results from sustained effort (1020). What should be stressed here is that creative domain expertise is not achieved at a point in time and maintained. It requires time and is continually reshaped by new experiences.

Persistence is underpinned by attention, a key resource in creative thinking. “The ability to sustain attention is a prerequisite to an effective working memory buffer” (Dietrich 2004, 4). Dietrich explains, “the ability to deliberately direct attention to pertinent information must be a prerequisite for creative thinking that is the result of effortful, constructive problem solving” (1015). Attention is both goal and stimulus driven; thus it can be in the service of both one’s will and subconscious (Crawford, 9). As James points out, attention is also about the things we focus on and, equally, the things we filter out:

It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought...it implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatterbrained state which...is called distraction. (James 1890, 403)

Knowledge, attention, and memory are all subject to the negative impacts of distraction. This directly affects cognitive performance in the creative process, learning, and wellbeing.

Further support comes from Bitgood (2003) who writes, “The total capacity of the attention reserve is assumed to be limited; the total capacity based on the physical energy available to the individual, condition of health, mental attitude, and so forth” (39). When considering “what sort

of ecology can preserve a robust intellectual biodiversity,” Crawford asserts that what helps to avoid distraction is “the absence of noise...a condition of not being addressed” (17). He adds, “silence surely contributes to creativity and innovation” (11). Weinschenk also states, “Deliberate and emotional creativity requires quiet time” (2011). This is in line with Maslow’s description of creative people as “solitude seekers” because creativity “requires independence of thought and decision” (Butler-Bowden 2015). Murray (1977) also considered this point of view, explaining a need for what he termed an *acoustic ecology*, by design, that is pro-human and in which our ability to attend to our thoughts is not interrupted by an “inhuman” environment (205).

Crawford explains attention as a limited resource and skill built up through effortful practice. “To attend to anything in a sustained way requires actively excluding all other things that grab our attention. It requires ruthlessness toward oneself, a capacity for self-regulation” (15) (see also Chapter 7: Self-regulation). Crawford points out, “attention-getting technologies...exploit [our] attention orientation response,” which was originally intended to protect us from threats (14). For example, being distracted by advertisements, popups in social media, cellphones, etc. contributes to impairing one’s attention. Over time, it in fact impairs one’s “ability to notice novelty.” This is called “attentional blindness” (14), and it causes individuals to pay more attention to certain stimuli (usually hyper palatable) over others. This can have a profound impact on creativity. With specific concern to sound, Dalton and Behm (2007) write, “irrespective of sound type, loud volume intensities impair human performance during simple vigilance and simulated driving tasks, comprehension” (149). He goes on to suggest:

Several studies have indicated that stress resulting from ongoing white noise can induce the release of cortisol...Excess cortisol impairs function in the prefrontal cortex...that helps to regulate “executive” functions such as planning, reasoning and impulse control. (Andrews in Rugg 2010)

Crawford asserts, “There is... a large cultural consequence to our ability to concentrate on things that aren’t immediately engaging, or our lack of ability: the persistence of intellectual diversity, or not” (17). Intellectual diversity, or independent thought, is an important element in fostering creativity.

3.2.1.5 Deliberate Practice

The type of ecology of attention described here parallels research that shows extended periods of solitude to be vital in acquiring domain expertise. The behaviour traits associated with this ability are described by Cain, who states, “creative people tend to be “not of an especially sociable or participative temperament...describing themselves as independent and individualistic....socially introverted” (2013, 74-5). A 1993 research study by Ericsson, Krampe and Tesch-Römer revealed that serious practice done *alone* was the strongest predictor for tournament rated chess players, and violinists (375), and by extension anyone who wants to become an expert in their domain. Ericsson, Krampe and Tesch-Römer submit that practicing alone is only effective if it is approached as deliberate practice:

Deliberate practice includes activities that have been especially designed to improve the current level of performance...carefully monitored to provide cues for ways to improve it further. We claim that deliberate practice requires effort and is not inherently enjoyable. Individuals are motivated to practice because practice improves performance....deliberate practice generates no immediate monetary rewards and generates costs associated with access to teachers and training facilities. (368)

Asch and Bern (2005) refer to the discomforts of deliberate practice as the “pain of independence” (157). According to Cain, “Forty years of research has reached the same startling conclusion...performance gets worse as group size increases” (89). This is in part because in

groups, individuals are “prone to conform,” bend to “peer pressure” and suffer from “evaluation apprehension” (90-1).

3.2.2 Independent Thought

While the construction of a knowledge base and the constraints of referents in working memory are critical for creativity, Weisberg (1999) asserted creative thinking, by definition, goes “beyond [formal] knowledge” (226). As early as 1950, Guilford suggested that divergent thinking, independent thinking, or breaking away from given ideals in order to pursue novelty, rather than relying on the limitations of convergent thinking rooted in established ideals, was essential to creative thought (444-54). Hybrid and syncretic music are two examples of elements from different frameworks working together to result in something novel. Divergent thinking in part refers to generating as many ideas as possible to a question, thus enabling maximum potential to arrive at novel answer (Treffinger, et al., 12). A kind of, “quantity provides an opportunity for quality,” approach (12). The emphasis on volume of ideas generated is paralleled by Dietrich’s emphasis that the more internalized domain knowledge one has across the association centers, the more ideas can be generated.

Similarly, Dietrich (2004) writes, “it is well known that expertise alone does not constitute creativity” (1020). He suggests that “independence of thought” (involving openness to new situations and ideas), is key in creative thinking for stepping outside of a given framework and take on different points of view, essential in generating novel combinations of ideas that would otherwise be irrational within the confines of formal knowledge (227). Limb and Braun (2005) assert that creative improvisation benefits from independence of thought in part through

attenuation of [controlled] “focused attention and conscious self-monitoring [which] can inhibit spontaneity and impair performance” (5), as discussed earlier. In Berkowitz’s words, this independence of thought allows the improviser to be “both creator and witness” (142). For example, during creative improvisation, when jazz musicians attenuate activity in the brain's self-monitoring system, this “increases the chances of reaching a higher artistic level” because more cognitive resources are available to address artistic aspects such as creative expression and choices (Pressing 1988, 52) rather than depleting cognitive resources by processing worries about social norms.

Finally, research into divergent thinking prompted research focused on the significant role of emotion in creative thinking. Dietrich (2004) writes, “By proposing that creative insights based on emotional computations are universal, and thus independent of formal knowledge, the relationship between knowledge and creativity can be refined even further” (1020). Dietrich thus provides a broader conception of the way in which working memory and the brain's associate areas are interconnected and interdependent during creative thinking.

3.2.3 Creative Risk-Taking

Stepping out from within one’s formal domain framework entails an element of risk, which is an essential behaviour needed for growth. Creative behaviours associated with risk-taking include:

- Accepting and “inviting conflict...letting go of certainties” (Fromm 1959, 53).
- “Openness to experience...living in the moment...trust in own ability” (Rogers 1961, 187-95).
- The “ability to deal with ambiguity and lack of closure” (Treffinger, et al. 2002, 33).
- “Breaking away from convention by connecting feelings with novel associations” (Khatena and Torrence 1973, 28).

- Being “absorbed” in the moment, checking the “ego...becoming less self-conscious[,] self-critical[,] evaluating[,] rejecting[,] judging...less analy[tical of] the experience” (Maslow 1993, 63).

In creative risk taking, attenuated ego and self-awareness once again appear to be critical.

Maslow wrote, “self-forgetting...is one of the paths to finding one’s true identity...” (63). He believed consciousness, especially of the self, inhibits “spontaneity and expressiveness”.

Becoming less self-conscious allows for reduced fear and inhibitions and facilitates creative “strength and courage,” illustrated in stubbornness, independence, self-efficacy, and strength of character (63). Additionally, the risk-taking afforded through being less publically self-conscious aids in the expression of self-narrative. Limb and Braun emphasize that the type of cognitive efficiency afforded by the use of non-controlled (subconscious) processes allows space for drawing on one's own narrative for self-expression, an important consideration in the creative process:

The frontal polar cortex appears to serve a broad-based integrative function, combining multiple cognitive operations in the pursuit of higher behavioral goals, in particular adopting and utilizing rule sets that guide ongoing behavior and maintaining an overriding set of intentions while executing a series of diverse behavioral subroutines. (4)

Limb and Braun suggest this is significant in a creative context, arguing that “improvisation [may be a] way of expressing one's own musical voice” (4).

3.2.4 Psychological Processes of Creative Thinking

Another way of looking at creative thought involves psychological processes, which combine cognitive and affective components, rather than merely separating thought into convergent and divergent reasoning. Dietrich explains there are “four ordinary psychological processes: deliberate cognitive, deliberate emotional, spontaneous cognitive and spontaneous emotional” (2004, 1011) involved in creative thinking.

3.2.4.1 Deliberate Cognitive

Dietrich (2004) defines "insight"—a state arrived at through sustained work within a given discipline—as a *deliberate cognitive* psychological process (1019). During this process, "[t]he frontal attentional network [executive center, including the prefrontal cortex] is recruited to search for task-relevant information in the TOP [temporal, occipital and parietal cortices of the brain, also known as associate areas]." The brain's executive center "can manipulate [this] information" (1019) by synthesis, analysis, abstract thinking, managing and maintaining belief system and self-narrative, and so on. Dietrich explains that this type of creative insight is reliant on two factors, the first being "the number of domain-specific items stored in TOP." In other words, the knowledge base and sustained effort matter, as the "quality of this type of insight depends directly on expertise" (1020). The second factor to consider in deliberate cognitive creative thinking is "how nimble the prefrontal cortex is" (1020), implying cognitive flexibility and an ability to step outside the conventions of a given framework in order to take new viewpoints that may contribute to insight.

3.2.4.2 Deliberate Emotional

The *deliberate emotional* process also involves the executive center; however, according to Dietrich, "instead of searching TOP areas for relevant information, attentional resources are directed toward retrieving affective memory that is stored in [the brain's] emotional structures" (1020). More specifically, Dietrich explains that the prefrontal cortex processes information from the cingulate cortex, the part of the brain that processes complex feelings "related to how you interact with others, and your place in the world." Weinschenk also asserts that deliberate emotional insight requires these two brain areas together (2011). Dietrich points out that "[E]motional insights that arise due to prefrontal involvement are likely to conform to a person's

norms and values” (1019). This is because, “given the evidence that the prefrontal cortex houses a person’s cultural values and belief system[,] the search engine is likely to be pre-disposed to retrieve knowledge that is consistent with his or her world view and past experiences” (1017).

An even closer look at the cingulate cortex reveals it is involved with “areas [that] contribute to emotion formation, processing, learning, planning, and decision making” (Hayden and Platt 2010, 3345). The “cingulate cortex is highly influential” in linking “behavioral outcomes to motivation” (e.g. linking a positive emotional response to an action, which results in “learning” (3339). Therefore, it has been suggested that deliberate emotional creativity has a role to play in *emotional learning* and *intrinsic motivation*, in that pleasant emotions connected to the creative process can fuel the *intrinsic motivation* to continue learning, exploring, [and] discovering by ongoing participation in the creative process (López-González and Limb 2012, 5).

3.2.4.3 Spontaneous Cognitive

Spontaneous cognitive insight is the result of a break for the conscious brain and the involvement of the unconscious part of the brain in creative thought (Weinschenk 2011). This process is also known as the “eureka moment” (López-González and Limb, 5) or “aha moment.” It results from a “burst of gamma wave activity preceded by the restful [alpha] brain state” (Vorhauser-Smith 2011, 9). Attention and focus are limited resources (Crawford, 15), and inevitably, individuals require breaks from conscious effortful thought, especially when “searching in vain for novel solutions forces you into a mental gridlock” (5). López-González and Limb (2012) write, “Until the problem is temporarily removed from conscious awareness, new perspectives cannot be gained” (5).

By taking a break, in which the constraints of the working memory are relaxed, space is made

available for the brain's associate centers to contribute at a subconscious level to the creative process. At the subconscious level the brain can multi-task by way of parallel cognitive processing, impossible within the limits of the working memory. More specifically, the spontaneous cognitive process involves the dopamine-rich *basal ganglia* of the brain, attributed to execution of automatic behaviors, outside of one's consciousness. As you perform an unrelated activity, the prefrontal cortex connects information from this area *in novel ways* via unconscious mental processing. During this down time, the brain strengthens any newly formed neural connections. Dietrich adds, "The quality of these types of insights depends on expertise. If relevant information is not committed to memory, it cannot be superimposed in working memory during times of defocused attention" (2004, 1020).

3.2.4.4 Spontaneous Emotional

López-González and Limb explain that this process is "usually referred to as an epiphany... occur[ing] when neural activity in the amygdala is spontaneously represented in working memory" (5). That is, there is no deliberate emotional or cognitive work on a creative problem in play at the time of insight (as in the deliberate cognitive or deliberate emotional processes) or in the time leading up to it (as in the spontaneous cognitive process). Dietrich explains, "because emotions do not require specific knowledge, insights based on emotional processing are not domain specific" (1021). However, López-González and Limb write, "While no apparent knowledge is necessary, specific skills may be required for these insights to come to fruition" (6). These skills or traits may include self-trust and self-acceptance. López-Gonzalez and Limb also add, "Given the biological significance of emotional events, these types of moments tend to be intense" (5).

Psychological processes involved in creativity, such as those described here, although in part shaped by the environment (cultural beliefs, goals, values), are also suggested to be underpinned by a non-linear, *self-ordering* brain system (because of the massive feedback loops in the brain), whereby the “whole is greater than the sum of the parts....[T]his system...constantly and spontaneously...reorganizes itself without any external force or executive plan” (Andreasen, 63).

3.3 IMPLICATIONS

Creativity resists any single or limited definition or conception. When considering wellbeing, creativity should be conceived as a dynamic, experiential, contextual, cyclic process; as multi-dimensional, in which interrelated and interdependent cognitive, affective, physical, and social components all play a role; and as interrelated with a goal-orientated self-system. Goals are pluralistic, process-focused, both use-value and exchange-value focused, transformative, and symbolically representational. Limiting this understanding or reducing its complexity, through lack of knowledge or by design, results in limited effectiveness in fostering creativity, and in many cases, undermines it instead.

In contrast to notions found within economic language that an economy should focus most on ideas to serve as its major capital; creativity’s value does not begin and end with its exchange value. In fact, reducing creativity to a commodity decreases creativity in general because such a conception omits swaths of personal, contextual or cultural experiential considerations related to wellbeing. Thus the intrinsic value of fostering individuals’ inner lives is usurped by a chronic public or external mediation of the self, under which conditions creativity and creative wellbeing cannot flourish. The creative process allows, and is, a holistic and aesthetic construction and understanding of the self, in both creator and audience, who are works in progress situated within

a cultural framework and having both an inner and outer life. That is, it is the intrinsically motivated creative process itself that offers the greatest value to human wellbeing and to creativity itself. SCWB is an approach to life rather than a simple solution to economic goals.

SCWB is a dynamic, transformative lifelong process in that expertise requires an internal knowledge base, memory, time, attention, multi-sensory aesthetic learning and a monitored feedback loop, yet these are the very skills and approaches educational institutions are systematically reducing from all types of creative study. Education aside, they are creative criteria that are diminished by a reliance on externalized data, an emphasis on speed, a lack of attentive skill, and virtual transmission of ideas, all of which are ubiquitous in the neoliberal climate. The notion of economic efficiency applied to creativity contradicts well-established research showing that the utmost patience is needed in order to acquire domain/tool expertise and to perform heuristic research in transformative, fulfilling self-discovery and self-transcendence in the service of creativity. Further, attention, a limited cognitive resource, has been shown to underpin knowledge acquisition, retention, and retrieval, as well as independent thought.

Therefore, research suggests attention ecology be considered when making decisions regarding creative environments. Ecology of attention should include thoughtful sound design of public space and buildings that provide opportunities for silence, isolating objects of attention, minimizing distractions, periods of homeostasis, and congruency between implicit and explicit motives.

Attention control and related deliberate practice are susceptible to the negative effects of attention-getting technologies and social anxieties, which can result in undermining the ability of individuals to take creative risks or assert independent thought. Finally, it is clear that creative

“thinking” extends beyond the boundaries of the brain; it is a mind-body-tool-medium-environment and feedback system. Domain expertise related to the skillful use of tools (e.g., musical instruments, paints, pots and pans, baseball bats) plays a role in facilitating aesthetic, experiential, and multi-sensory perceptual learning by drawing individuals out from the boundaries of their heads into the *real* world. If this is the case, approaches to learning (i.e. the development of an internal knowledge base) that increasingly rely on virtual experiences and representations, externalized data, and decreasing amounts of real and real-time feedback, need to be called into question.

At the same time, creative thinking goes beyond formal knowledge (constraints) and requires leaps of faith by which individuals step away from the constraints of cultural frameworks and the brain's executive center. This aspect of creativity requires and facilitates freedom of thought, openness to new experiences and points of view, intrinsic motivation, self-esteem, self-actualization and self-transcendence. A supportive creative climate allows for subjective and ambiguous knowledge and provides a foundation of wellbeing from which to overcome social fears and obstacles through creative participation, in particular, creative risk taking. It is this author's opinion that this view of creativity, as interdependent with wellbeing, warrants more consideration, time, and importance in learning, work, and life in general; not only in response to ill-being but as part of its prevention, as a regular experiential dimension of living. The commodification and privatization of creativity in service of manifestations such as the “creative economy” all but ignores this interdependence, creating instead a climate of chronic self-censorship and external mediation of the self and replacing a supportive social context with an isolating, competitive one. It is also exhausting. This limits risk-taking, sharing of and access to

ideas, and independent thought in order to control exchange value. Thus it undermines the intrinsic benefits of SCWB and undermines the very creative skills and mindsets it professes to foster. Freedoms, provisions, and resources must include space for the free exchange and sharing of creative ideas and objects that will keep cultural knowledge and practices relevant and dynamic towards growth and human centered wellbeing.

4. SELF-SYSTEM

Social psychologists Smith and Makie (2007) write, “one of the most important life tasks each of us faces is understanding both who we are and how we feel about ourselves” (136). This understanding of self is crucial to our wellbeing, but what do we mean when we refer to the self, and how does this impact our understanding of SCWB? The following chapter will reveal the self as non-static and multidimensional, and will introduce the social, cognitive, physiological and affective aspects of a self-system that contribute to creativity and creative wellbeing.

4.1 MULTI-DIMENSIONALITY

The self was historically understood in one of two ways: 1) an intrinsic aspect of experiencing phenomena such as perception, emotion, or thoughts, or 2) the object of consciousness. It was seen primarily as static, but this view has changed. “Is the self an enduring *agent* (an *inner self*) that controls thoughts over time or a non-static phenomenon, an aspect of the biological body, genetically encoded, but shaped considerably and continually over a lifetime by the environment?” (Hood 2012, 17). Hood (2012), as with most researchers, describes the self as a non-static phenomenon. He writes, “we need to abandon the notion of internal individuals [agents], which is inadequate to explain the complexity of our brain” (17).

Ramachandran (2011) asserts the unitary self is an illusion (247) and poses the question, “What if the self is...a result of the push and pull of multiple forces of which we are largely unconscious?” (266). Research also shows the self to be a multi-dimensional, goal-directed system in which many of our actions, thoughts and behaviours take place subconsciously, and are out of our control. Bandura (1999), for example, writes:

Social cognitive theory explains psychosocial functioning in terms of triadic reciprocal:

causation....The term causation is used to mean functional dependence between events. In this model of reciprocal causality, internal personal factors in the form of cognitive, affective and biological events; behavioral patterns; and environmental events all operate as interacting determinants that influence one another bidirectionally. The relative contribution of each of the constituent classes of influences depends on the activities, situational circumstances, and sociostructural constraints and opportunities. The environment is not a monolithic entity.(6)

Similarly, Sedikides and Spencer (2007) explain the self-system as including *executive self, motivation, cognition, affect, and social identity* (3). Sharma and Sharma's research on wellbeing, focused on the premise that discussions on wellbeing must account for the self-system as a "unitary entity...a cognitive structure consisting of multiple elements (121), [with] "enduring and flexible processes that are both conscious and unconscious" (118).

Further, the self-system has been suggested to extend beyond its corporeality into the environment as part of an *extended* self-system; therefore, there is a socio/environmental dimension at play. This will be discussed further in the section on embodied cognition in this chapter. For the moment, it is important to recognize that the self is multi-dimensional, that dimensions of the self-system are interrelated and interdependent, and that it is difficult to discuss each dimension of the self-system in isolation; thus some overlap in the discussion is unavoidable. Therefore, this and other research is now centered on the concept that the self is multi-dimensioned and extended. As such, the discussion ahead addresses these aspects.

4.2 COGNITIVE DIMENSION

Cognition refers to the "process of knowing, including aspects such as awareness, perception, reasoning, and judgment...that which comes to be known, as through perception, reasoning, or intuition; knowledge" (The American Heritage Medical Dictionary 2007). Further, cognition is "not a disembodied experience" but appears to be linked to motor sensory systems and process

(Pfeifer and Bongard 2007, 9). Knowledge and functional use of knowledge are two general areas of cognition. According to Bandura (1989),

Cognitive functioning involves knowledge, much of it specialized, and cognitive skills for operating on it. Hence, cognitive attainments require the acquisition of domain-relevant knowledge along with the judgmental rules that apply to that area of activity. (Feldman, 1980) (12)

In Chapter 3, knowledge and memory were introduced as critical aspects of creative thinking, but what of knowledge/memory system in relation to self-identity, coherence, and growth?

4.2.1 Self Memory System (SMS)

According to Misztal (2005), “memory is a control mechanism that we use to sort relevant from irrelevant information” (1335). Put simply, memory refers to the ability to recall facts and events. According to Conway (2005), “The relationship between the working self and long-term memory is a reciprocal one in which autobiographical knowledge constrains what the self is, has been, and can be, whereas the working self-modulates access to long-term knowledge” (594) (for further discussion on knowledge, see chapters 3, 5, 6, and 7). Cognitive research suggests one’s memories (including all knowledge) and sense of self are interconnected in a way, which has been termed the *Self Memory System* (SMS).

Processing of the *autobiographical narrative* is associated with pre-frontal cortex (executive center) activity. Memories that we can recall and reconstruct are called *episodic* memories (also discussed in connection to knowledge in Chapter 3) and are the crucial memories that we use to shape the self, the “particularly personal ones are known as *autobiographical memories*” (Hood, 79). Autobiographical memory and working memory can work together in processing specific autobiographic memories or operate independently of one another. Conway adds that a “key

feature of the approach taken to memory here, is that cognition is driven by goals: memory is motivated” (594).

4.2.2 Self-Coherence

Another important aspect of memory is that it is not static; “human memory may be altered, distorted, even fabricated, to support current aspects of the self” (Conway, 595). Ramachandran explains this cognitive process as the left-brain attempting to avoid any cognitive dissonance that occurs when one’s behavior is out of line with beliefs and narrative, even “fabricating information to preserve a harmonious self-view” (267). If left “unchecked, a person may be rendered delusional or manic” (267). This is when the right brain steps in. The right hemisphere also “allows [one] to adopt a detached, objective (allocentric) view of [one’s ‘self],” providing information that directs the left hemisphere to revise the self-narrative so that it does not become “egocentric” (267). Ramachandran explains, “the two hemispheres have different but complimentary, coping styles in dealing with the world” (266). Conway explains this process:

This is referred to...as coherence or self-coherence. Coherence is a strong force in human memory that acts at encoding, post-encoding remembering, and re-encoding, to shape both the accessibility of memories and the accessibility of their content. This is done in such a way as to make memory consistent with an individual’s current goals, self-images, and self-beliefs...Thus, memory and central aspects of the self-form a coherent system in which, in the healthy individual, beliefs about, and knowledge of, the self are confirmed and supported by memories of specific experiences. (595)

Conway explains that experience confirms the knowledge and memory that shape beliefs, values, and goals. Further, according to Hood, an individual’s social identity is also continually “reconstructed and malleable....transformed by new experiences” (79). Therefore, the self-identity changes as the contexts we exist in change (self-coherence is dynamic). He explains:

A stable, integrated, self with a confirmatory past that yields a consistent and rich life story....A coherent self will have high self-esteem and a strong positive sense of wellbeing, both powerful predictors of physical health. Thus, the benefits of coherence may then be considerable. (Conway, 596)

Therefore, the SMS has two general functions, “One is to represent reality as this is experienced, but in cognitively efficient ways, and another is to retain knowledge in such way as to support a coherent and effective self” (Conway, 596). Conway terms the coherent and consistent values, beliefs, and norms of an individual as the *conceptual self*:

The representations of the conceptual self are socially constructed schema and categories that define the self, other people, and typical interactions with others and the surrounding world. These schema and categories are drawn largely from the influences of familial and peer socialization, schooling, and religion, as well as the stories, fairy-tales, myths, and media influences that are constitutive of an individual’s particular culture. (597)

Conway writes, “A coherent self will have high self-esteem and a strong positive sense of well being” (596). Positive self-esteem tends to be built on “optimism, confidence, and self-acceptance.” It also reflects the ability of an individual to not “worry much about what others think about them” (reduced sense of public self-awareness). In contrast, individuals with a negative view of their conceptual self, demonstrate few self-esteem traits (597). Similarly, Collingwood writes, “The extent to which one has a pervasive, enduring though dynamic, feeling of confidence that one’s environment is predictable and that things will work out as well as can reasonably be expected.” In other words, it is a mixture of optimism and control (2015). Antonovsky asserted that understanding what happens around one in relation to one’s life introduced this link between coherence and wellbeing and others (cognition) was key to wellbeing. Along with understanding, Antonovsky asserted management (behaviour) and meaning (motivation) where the other two indicators of one’s sense of self-coherence (SOC)

(Eriksson and Lindstrom 2005). Collingwood summarizes the meaning of each dimension of SOC as follows:

Comprehensibility is the extent to which events are perceived as making logical sense, that they are ordered, consistent, and structured. Manageability is the extent to which a person feels they can cope. Meaningfulness is how much one feels that life makes sense, and challenges are worthy of commitment. (2015)

McGilchrist (2009) believes that self-coherence is being threatened by a left brained society and this has serious ramifications to wellbeing. McGilchrist explains:

I believe that over time there has been a relentless growth of self-consciousness, leading to increasing difficulties in co-operation. The resultant instability is evidenced by alternations between more extreme positions; and, although there have been swings in the pendulum, the balance of power has shifted where it cannot afford to go—further and further towards the part-world created by the left hemisphere. (ix)

4.2.3 Embodied Cognition

When considering the connection between SCWB and cognition, discussions surrounding creative thinking are often predicated on the assumption that cognitive processes take place within the boundaries of the brain. However, Crawford asserts “solving problems needn’t be accomplished solely by the brain, but can be distributed among the brain, the body, and the world...[T]he world is known to us because we live and act in it, and accumulate experience... the boundary of our cognitive processes...in a sense is distributed in the world we act in (50-1). Similarly, Fox (2008) writes, “experience from an individual perspective is a complex interaction between body, sensory input, and neurological processing—a relationship with the world as humans en-counter, interpret, and shape messages” (41). This field of research is often termed *embodied cognition*. This conception, a reciprocal relationship between body and mind was introduced in Chapter 3 with reference to knowledge and aesthetic learning. Here we look more closely at its relationship with wellbeing.

4.2.3.1 Mind-body-tool and Ecological Control

Rosch, Thompson, and Varela (1993) write:

By using the term embodied we mean to highlight two points: first, that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological and cultural context. (172-3)

Likewise, Shapiro (2011) explains embodied cognition by proposing multiple hypotheses. First, his *conceptualization hypothesis* refers to the process whereby the properties of one's body help determine meaning in the world. Shapiro supports his *conceptualization* hypothesis with a *replacement hypothesis*, whereby cognition is not simply symbol processing but a dynamic system involving brain, body (e.g., musculoskeletal and mechanical feedback, and sensory system and physical stimulation), and environment. He follows this with a *constitution hypothesis* whereby the mind is extended beyond the boundaries of the brain over the whole body (4). These hypotheses are predicated on the assumption there is feedback between the body and the environment and this feedback, and as Dawson (2014) puts it, is "structured by the nature of the agent's body" (62). For example, consider a string musician's response to ecological control in order to sense whether he or she is in tune. Listening for the beating frequency of a pitch is augmented by the tactile sensation of the beats vibrating under the fingers in the strings; he or she feels to hear. Such processing is happening both in the brain and in the body's skillful interaction with the instrument.

Crawford uses the example of the smooth gait of modern robots. We may believe this is simply the result of "movement planning and calculations, based on some representation of the world" (which Shapiro describes as analogous to our *inferential* cognitive process; "the manipulation of

symbols, where the manipulations often involve the application of rules for the purpose of deriving conclusions that go beyond the information [that is, for example, presented to a single sense, such as the eye or ear]) (28). However, robot developers arrived at a more natural gait in the machines by using “*ecological control*, [in which] the processing...is partially taken over by the dynamics that are inherent in the interaction between the robot and the environment [involving passive dynamics]” (Crawford, 52). Similarly, the embodied cognition used in motorcycling results when “solicitations of the motor cycling-specific environment trigger steering and other control inputs for the rider....these perception-action-affect circuits represent an achieved integration” (59). Without this achieved integration, inferentially based decisions would be too slow to respond to the environmental demands on the rider.

Finally, shared knowledge is constrained by its culture in the same way the constraints of motorcyclists are shaped by the environment. Crawford explains this saying,

I suggest that genuine agency arises not in the context of mere choices...but rather, somewhat paradoxically, in the context of submission to things that have their own intractable ways, whether the thing be a musical instrument, a garden, or the building of a bridge. (24)

As suggested, embodied cognition may include the skillful use of an object, as an extension of the body. Crawford explains the object and body form a “*closed loop*...between action and perception...what you perceive is determined by what you do, just as when we make use of our hands” (47). Embodied cognition and mind-body-tool triangulation can contribute to self-transcendence, pulling us out of our heads, away from the abstract and representational (cognitive inference), into the real world. Crawford writes:

Through the exercise of a skill, the self that acts in the world takes on a definite shape. It comes to be in relation of fit to a world it has grasped.... If the attentive self is in relation to a world it has apprehended, the autonomous self is in relation of creative mastery to a world it has projected. (25)

Embodied cognition demands that we come face to face with the opportunities and challenges the world reveals within frameworks such as cultures, societies, and the natural world in order to learn and grow.

In addition to its role in perception, embodied cognition plays a significant role in memory and imagination as a vehicle for experiential learning. Specifically, episodic memory has been suggested to involve “re-enactment of past experiences...[and] the various bodily structures implicit in that structure” (Shapiro 2011, 10). Episodic memory, aided by embodiment and experiential learning, contribute to both self-consciousness and self-coherence in that they foster a sense of ownership and or self-awareness through first hand (embodied) experience of phenomena (13). As will be discussed in Chapter 7, visualization, dependent of embodiment and experiential learning, plays a positive role in self-regulation and aspects of developing domain skills used in creative practice. Further, affective conditions of the body also shape cognition (see Chapter 7).

In the face of such data that shows human cognition as having evolved to function in a real environment, there is, strangely, an ever-increasing pressure to turn to virtual representations. The use of virtual learning and experiences are often seen as cost cutting measures and as important facilitators of the 21st century technology skills demanded by the knowledge economy in learning, work, and private spheres of life. However, virtual learning has been questioned by many who assert the importance of the idea of learner as an active participant, contributor and owner in the learning process. “[I]nnovative

knowledge should include learners' experiences and perspectives" (Jeffrey 9). The accommodation of the learners' own experiences contributes to their sense of self-worth, autonomy, contribution, and connectedness to their classmates. In one study, "learners valued being included in decisions concerning curriculum direction and pedagogic processes, which established a sense of belonging and having their opinions respected. These *active learners* enjoyed feeling a "sense of place about their learning environment and their inclusion in a place, that for some periods appeared to belong to them, as well as feeling a sense of belonging" (Jeffery 14).

Whether the classroom is virtual or real, teaching happens through dialogue, not monologue. "Research finds that whatever the mode of delivery, students place a high value on interaction with their teachers and with each other" (Bates 2001). This is most easily facilitated in classrooms where a memorable class is "created" through the collaborative efforts of teacher and active learners; it is unique each time it happens. Online courses can have an anonymous, replicated quality; students can get the same type of information from a book or video, or from last semester's course offering unless the professor is highly skilled and experienced in creating collaborative online learning environments—a time-consuming and costly endeavour (assuming one is paid for the time involved). English professor Mark Edmondson writes:

Every memorable class is a bit like a jazz composition. There is the basic melody that you work with. It is defined by the syllabus. But there is also a considerable measure of improvisation against that disciplining background....This type of learning environment is near to impossible to facilitate through online learning. With every class we teach, we need to learn who the people in front of us are. We need to know where they are intellectually, who they are as people and what we can do to help them grow. (2012)

Similarly, Ashram, considering the "dedicated instructor" as having to become a "24-hour professor" adds other concerns:

To design a successful online learning program, you must address major learning factors such as customization and communication in teaching students based on their individual learning styles. There are two key points to consider: the design of the course material and the level of support given to the student. Online courses are not an inexpensive option for Universities. It is also unethical to deliver a course that does not meet the needs of students....The psychological reaction to online learning must also be considered as some students struggle with independent learning. (2013)

Given the data supporting embodied cognition's role in perception, memory and imagination (all three of which are important to creativity), and given that innovative knowledge acquisition should be a socially reciprocal process, any tendency toward the ubiquitous, unquestioning endorsement and adoption of virtual learning should be critically examined.

4.2.3.2 Mirror Systems

The relation between embodied cognition and creativity becomes clearer in the context of discussing the brain's mirror systems. Reaching out beyond the values, goals and beliefs associated with one's own needs begins perhaps with empathy, an emotion that is connected to the brain's mirror system. Ramachandran suggests that the mirror system "may be central to social learning" (23). Mirror neurons are found in parts of the brain connected to motor function, and to the processing of face, body, and movements. Mirror neurons represent the perception of the actions that other cells connected to pure motor actions have (Blakeslee and Blakseele 2007, 164). These circuits and cells are only active when one perceives an action. Scientists have discovered many more mirror circuits that "allow us to grasp what is in the mind of others, *not through conceptual reasoning* but by modeling their actions, intentions, and emotions in the matrix of [one's] body mandala" (166). Here we are discussing an aspect of embodied cognition that views meaning-formation as corporeal, as understood through the body.

Using music as an example, when students of instrumental music watch another instrumentalist playing the same instrument they play, they “automatically stimulate the action in their own brain.... [They] can read his intentions [and] know his goal” (Blakeslee and Blaksee, 166). In fact, the stronger the correlation in skill between the observer and performer, the stronger the mirror response will be. Further, observing someone that shares our skill set will reinforce our own skills subconsciously, and they will improve even away from hands-on practice. A study by Engall and Keller (2011) showed that specific brain regions were activated only by what musicians perceived as improvised music (5). The significance is that listening and watching improvised musical performance helps reinforce the neural processes connected to the knowledge [learners] have or are developing (López-González and Limb, 8). The connection between music cognition and production with embodied cognition is found within the research of Pieter-Jan et al., (2014), who explain that the body and body movements play a central role in musical meaning formation processes (67).

The connection between the mirror system and affect is also considerable in embodied cognition. “The violation of visual tendencies charges up our mirroring system, making us feel exhilarated” (Blakeslee and Blaksee 2007, 170). Our heightened engagement may lead to an emotional response triggering a more memorable event. This supports Meyer’s Violation of Tendencies theory and research by Levitin in relation to the emotional “tagging” of music. As far as intelligibility of a musical schema goes, mirror neurons provide the ability “to adopt another person’s point of view and set the stage for horizontal transmission of culture” (171). Therefore, mirror neurons are “parasitic with culture,” “absorbing up culture the way a sponge sucks up

water” (171). In relation to creativity, mirror neurons help with the interpretation of creative intent.

It is no wonder, given findings on mirroring systems, that body language, specifically paralinguistic gesturing (head movements, raised eyebrows, and similar gestures that often accompany or replace speech) is helpful in communicating musical meaning between performers and between musician and audience. This visual augmentation of the meaning provides “reinforcement, augmentation and anticipation of the auditory signal” (Tan, Pfrodresher and Harré 2010, 230). A study by Dahl and Friberg (2007) found that an audience could identify some emotions (happiness, sadness, anger) solely through body movement in the absence of sound (599). Physical gestures accompanying music reflect a creative purpose and allow for an understanding that goes beyond what is available in the sound or visual image alone (Levitin 2007, 206). Once again, we can attribute such findings to “mirror neurons for emotion reading and empathy” (Blakeslee and Blakselee, 177). These neurons give us the ability to feel and empathize with complete strangers.

The mirror systems theory and the broader theory of embodied cognition suggest a clear link between body and mind in understanding what is perceived in the world outside the self. In fact, it further supports that the self involves and is continually informed, in a subconscious way, by things beyond it. It is not a separate, static, or exclusively cognitive entity. Corporeality, therefore, is important in any discussion of the self, cognition, and creativity.

4.2.3.3 Distributed Cognition

The crucial role embodied cognition plays in culture-based learning is noticeably absent in 21st century skills education required by today's knowledge economy. It is suggested that technological literacy provides skills in *distributed cognition*, where "intelligence is distributed across brain, body, and world" (Jenkins 2009, 65), and that contemporary educational policy should foster intelligence based on this understanding. In other words, it should foster intelligence that is, as Pea puts it, "accomplished rather than possessed," allowing for ways and "forms" in which to augment and "externalize memory" as in a database (50). Another technological skill, *networking*, allows for like-minded people to come together and contribute to a *collective intelligence*, in which the sum of the parts is greater than the individual, and in which even those with small contributions are valued (Jenkins, 72). Other technological literacy skills include *Judgement*, "the ability to evaluate reliability and credibility; *Transmedia navigation*, the ability to follow the flow of stories; and *Simulation*, the ability to interpret and construct dynamic models of real-world processes and information across multiple modalities, of different information sources" (Jenkins, xiv). These skills work well in a virtual world; however, they may be limiting in that they do not contain participation from those who don't have access (digital divide), and in that they depend on simulations of physical experiences from which to learn.

Distributed cognition and collective intelligence, even though they can be considered separate skills, are commonly combined and referred to as *Shared Knowledge* (Jenkins, xi). Those promoting e-learning suggest that shared knowledge is a benefit provided by on-line education, an important twenty-first century technological literacy skill; however, Romich (2012) sees this as a "high-tech leash...removing one's need to remember anything and encouraging a rapid,

distracted sampling of small bits of information from limitless, unaccountable sources” (10-11).

He conjectures:

The Internet is habitually and instinctively employed to negotiate our thoughts and our intentions. Over mediated, we’ve begun to envision our conscious selves as a sort of computer: our minds in a state of permanent distraction, dependent on external networked data bases for memories, knowledge, and council, both vital and trivial. Our cognition is being transformed by technology dependency and the ramifications of this are actually biochemical and neurological...we fetishize endlessly more-capable gadgets, celebrating the convenience they bring us as we move our lives into the net, corporatize our personal lives in public media exhibitions, broadcast even our most banal day to day habits to be tracked, and sacrifice our privacy as a commodity of information to be traded in a virtual derivative fund like maze. And so imprisoned in this cyber cave, the digital shadows of ourselves have become the most real us we are capable of. (6)

The SMS, embodied cognition, and the feeling of empathy connected to the mirror system illustrate the cognitive processing involved in identity, coherence, and learning. This cognitive processing involves widely distributed and hierarchical brain areas. Relatedly, creative thinking is dependent on a coordinated effort of widely distributed brain areas across both hemispheres. “This strengthens the *corpus callosum*, the bridge between the two hemispheres...allowing messages to get across the brain faster and through more diverse routes...this may allow musicians, [as an example], to solve problems more effectively and creatively in both academic and social settings” (Collins 2014).

4.3 SOCIAL DIMENSION

The idea of self and environment as interdependent, reciprocal, and part of an extended and embodied self is expressed by Cassam (2005): “Being conscious of oneself as subject of thought and experience is being conscious of oneself as a corporeal object among others” (3).

Ramachandran writes, “The self defines itself in relation to its social environment” (274).

Sharma and Sharma state this relationship as follows: “Self-identity and social self-identity are two major subsystems of self-concept...Self and identity are concerned with the question: ‘Who

am I?’ Both are inherently personal and social. Self-hood is almost unthinkable outside a social context” (118). Tileagă, (2013) describes self-identity as an ongoing process of “construction and reconstruction” within the “context of a complex relational system” of “social practices” (88-9).

4.3.1 Identities

Sharma and Sharma explain there are three general forms of self-identity: *personal identities*, *role identities*, and *social identities*. Personal identities refer to the “idiosyncratic” qualities that make each individual unique. Role identities refer to the self, conceived as “performing a role,” through which a self-determined sense of success or lack thereof, in regard to the role, correlates with a related range of positive to negative affect. Social identification refers to identities in relation to a “social group or category” (120). Generally, this idea of identities can be reduced to the idea that the self-system has two general dimensions: the thoughts and behaviours of a *public self and private self*. The expression and representation of the identities individuals project are not always reliable for individuals as a measure of how they are perceived. Baumeister and Bushman explain that a person can perceive himself or herself as outgoing and friendly, while at the same time being perceived as introverted and quiet by another (58).

A positive sense of self-identity and interpersonal relations is fostered through experiences of individuals or groups, which are “mediated by social relations” (Decortis and Lentini 2009). If the framework in which social relations occur is internally contested, and if it is a framework in which fostering a sense of mutuality, belonging, competence, meaning, sociocultural homeostasis, and equity is a priority (see Chapter 3), this can help meet basic psychophysiological needs such as social belonging, safety, self-coherence, self-esteem, self-actualization, and self-transcendence. Therefore, it can be suggested that SCWB relies in great

part on the health of the social dimension of the self-system, in which the self and others are seen as interdependent and interconnected within a shared cultural framework.

4.3.2 Symbolic Interactionism

One way in which individuals attain a sense of self through their interaction with others and reflect on these interactions is termed *symbolic interactionism*, a type of social constructionism with two areas. The first area, *self-perception theory*, attempts to explain the “emerging” self through interaction with others within a social structure. According to Fraser (1987), self-perception involves introspective thought “in which a person gathers information about oneself through cognitive functions and emotions... associated with social comparison” (721-22). Blumer (1986) explains that this process involves three basic premises of symbolic interactionism:

- Humans act toward things on the basis of the meanings they ascribe to those things.
- The meaning of such things is derived from, or arises out of, the social interaction that one has with others and the society.
- These meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he/she encounters. (2)

Fraser describes this as a process by which the self is understood as a “purposeful and creative social product” (721-22).

The second area of symbolic interactionism is *looking glass theory*, used in sociology to describe the “concept of role behaviour” (Sharma and Sharma, 119), and used in social psychology to explain the role “reflected opinions of others around us” and the parts they play in shaping the self-system (Hood, 17). Since “[p]eople shape themselves to fit other people’s perception, ...these [identities] vary from one person and context to the next” (71). This process is guided by “The actions and behaviors that others show towards a person [that] will help that person

establish a sense of how others perceive them” (Baumeister and Bushman, 57). Cultural practices, for example, are sources of social identities and also serve as “strategies for managing self and its relationship to the rest of the world” (Sharma and Sharma, 119). Therefore, individuals create “identities, which are multiple, specific, and have self-meanings situated in a person, role or group” (119).

To summarize, symbolic interactionism can be summarized as:

A theoretical perspective that emphasizes how people interpret, act toward, and thereby give meaning to objects, events, and situations around them. This perspective highlights how human meanings and actions arise out of the social processes of interpretation, communication, and role taking. (Sandstrom, Martin and Fine 2006, 30)

4.3.3 Reflexivity

Similar to the theory of social interactionism is the theory of reflexivity, which Mead describes as:

the turning-back of the experience of the individual upon [him-/herself] that the whole social process is thus brought into the experience of the individuals involved in it; it is by such means, which enable the individual to take the attitude of the other toward [him-/herself], that the individual is able consciously to adjust [him-/herself] to that process, and to modify the resultant of that process in any given social act in terms of [his/her] adjustment to it. Reflexiveness, then, is the essential condition, within the social process, for the development of mind. (1934, 134)

According to Giddens (1976) “nothing is more central to, and distinctive of, human life than the reflexive monitoring of behaviour, which is expected by all competent members of society of others” (114). Coombe and Weiss (2015) write, “To some degree, cultural heritage practices inevitably emphasize how people identify themselves, what they value, and how they define practices of significance, all of which may encourage normative reflexivity” (54). Sharma and Sharma also state that a sense of self is shaped by the “aspect of a person that experiences, reflects, and acts upon self-understanding derived from experience” (119). They add that this

experiential aspect of the self-system aids in “an individual’s comprehension of him or herself as a discrete, separate entity” (119).

4.4 BIOLOGICAL DIMENSION

While the self is largely defined in relation to the social environment, we are learning that biology also plays a significant role. In fact, as shown, some prescribed biological aspects of the self are difficult or impossible to change, even given social constraints. Research suggests the social dimension of the self is shaped in relation to a “genetic blueprint for the brain that is inherited” (Hood, 19). Humans are biologically programmed to inhabit a sociable environment inhabited by other humans. Brains have evolved to “absorb information from each other...thus [are] shaped to the world through interaction with it” (17-27). Dunbar (2003) explains that human’s large brains have not simply evolved to be good abstract problem solvers but to solve problems that come with existing in groups. Problems include how to respect the needs of others while meeting your own (53).

4.4.1 Cognitive Limit to Number of Meaningful Relationships

Dunbar suggests human cognition has upper limits that do not allow for much more than a hundred and fifty meaningful relationships, stating:

There is a cognitive limit to the number of individuals with whom any one person can maintain stable relationships, that this limit is a direct function of relative neocortex size, and that this in turn limits group size....the limit imposed by neocortical processing capacity is simply on the number of individuals with whom a stable inter-personal relationship can be maintained....Thus, even in contemporary western societies, where individuals are operating egocentric networks within a virtually infinite array of social possibilities, social network size and differentiation reflect the sociocentric networks observed in traditional societies, suggesting that the cognitive constraints on network size may apply universally to all modern humans. (53-69)

Dunbar's research shows that strong ties creating strong societies require people to be close to each other face to face, and this cannot be duplicated in large-scale social networks. He writes, "Evidence from the ethnological literature provides some support for this, since census data from a range of tribal and more traditional societies indicate that groups of about this size are in fact a common component of human social systems" (54).

Rather than using research to rethink how societies are formed and maintained, research is being used by businesses to manage *work group* sizes for maximum efficiency and productivity (Shannon 2004). This is in spite of the fact that the evidence shown that the limit of 150 people pertains to the *total* number of relationships maintainable in one's whole life, not in a single work group, and that most creative breakthroughs are achieved in isolation (Cain 2013, 74-5). There are "diminishing returns" with online social network groups that have more than a hundred and fifty participants (Shannon 2004). In fact, massification of social scale, e.g., the global citizen, may impact "creative intelligence" as described by Moran and John-Steiner (2003), who assert that "creative intelligence" involves ongoing self-management and self-regulation within the environment "as fundamental to the effective, dialectical interaction of an individual with his or her environment and the intersubjective understandings among members of a community" (9).

4.4.2 Seeking

Burnham and Phelan (2003) believe evolution programmed us to be discontented in order to survive (3). This discontentedness is attributed to what Panskeep terms the seeking/wanting system. Panskeep (2005) asserts:

All mammalian brains do contain a general-purpose SEEKING system designed to actively engage the world, especially its life-sustaining resources...This seeking concept provides a coherent multi-dimensional psychobiological framework for understanding what this system provides for organismic psychobehavioural coherence. (47)

According to Panskeep (1988):

the seeking system is a necessary system, in that it “drives humans not only to fulfill basic needs, but also to fulfill intellectual, creative needs. It makes us excited about ideas, about asking questions, or about making connections; that is, it entices us to behave creatively. (151)

According to Weinschenk, the wanting system propels one to action and the liking system makes one feel satisfied and, therefore, pauses one's seeking. If seeking isn't turned off at least for a little while, then one starts to run in an endless loop. The dopamine system is stronger than the opioid system. People tend to seek more than they are satisfied (2012). According to health professionals, seeking addiction can “overwhelm conscious, reason, compassion, love, family bonds and community, and may even lead to clinical depression (Schumaker 2004). The loss of the ability to “have a normal dynamic interaction with reality” (Kilbourne 2006, 12) results in a worldview:

[in which] only personal success and fame are the ways to attain respect and power...in which the only idol is personal affirmation, and where seduction, persuasion, and dominance are the only ways to become an ‘autonomous’ and accomplished person. (Lasch 1979, 96-8)

Neoliberalism contributes to the problem of seeking by “normalizing individualistic self-interest...and consumerism” (Barnett 2010, 3). It “supplant[s] collective, public values with individualistic, private values of market rationality as the guiding principles of state policy, economic governance, and everyday life” (2). Preferred neoliberal behaviour traits result in "reorganization of our personal lives and relationships on the model of market relations...for

economic gain” (41). These behaviours are essential in the maintenance of a consumer economy. Professor of Economics, W. Williams states, “without greed, our current economic and social structures would implode...greed produces preferable economic outcomes most times and under most conditions” (Williams in Schumaker 2001). Similarly, Campbell (1989) believes the addictive potential of the seeking system in a consumer public is exploited by creative industries that persuade people:

[to] continually purchase the ‘new’ and to be unhappy with the ‘old,’ [repeating this process] so rapidly that the new is already old, [leading] to a culture of eternal dissatisfaction: an apparently endless pursuit of want....This greedy desire is not only normal, but is essential for the maintenance of the socio-economic order. (37)

"If we are happy and content as a byproduct of greed/seeking, then the feeling of seeking/greed will subside—poison for a modern consumer economy” (Schumaker 2004). This use of creativity, to promote maladaptive greed and seeking behaviours, is obviously detrimental to SCWB.

4.4.3 Temperament

Another biological component of the self is temperament. According to Rothbart and Bates, temperament involves individual differences in “affect,” “attention,” and “activity,” and is reflected in “self-regulation” and “reactivity” (2006). Similarly, Cain conceives *temperament* as the degree of reactivity between individuals and their experiences from high to low; these are “inborn, biologically based behavioural and emotional patterns, observable in infancy and early childhood,” remaining observable and consequential throughout one’s life (Cain, 101).

Temperament “is in our DNA, literally” (29). The biologically prescribed tendency with which individuals react to situations in the environment can have profound effects on individuals’ ways of negotiating their environments. An individual’s temperament may directly impact creativity-

relevant behaviour traits such as: attention, openness and courage to explore new ideas and experiences (risk-taking), ability to follow curiosity, sense of humour, playfulness, tolerance for ambiguity, aesthetic sensitivity, collaboration, and adaptability.

It is important to understand that temperament differs from the idea of *personality*, which refers to the shaping of the self through one's interaction with the environment (Cain, 101).

Introversion and extroversion, for example, are dimensions of temperament that fall on opposite ends of a continuum aligning with high reaction and low reaction respectively. Jerome Kagan (1989), concluded, "The footprint of a high or low reactive [introverted or extroverted] temperament never disappeared in adulthood" (117). However, according to research, where we fall on the introvert-extrovert spectrum profoundly affects our personality. Cain states, "people who inherit certain traits tend to seek out life experiences which reinforce those characteristics [according to the] theory of gene-environment interaction" (109). This means our personalities can be shaped only to a point by the environment, and that the environments we encounter are partially shaped by our genetic traits. As introverts mature, they can learn how to manage their high reactivity, but only to a point. According to Cain, "This helps to explain why high reactive kids retain some of the fearful aspects of their temperament into adulthood, no matter how much social experience they [high reactive people] acquire or free will they exercise" (119). It is estimated that nearly a quarter of high reactive children "suffer from some type of 'social anxiety disorder,' a chronic and disabling form of shyness" (111). Key attributes of introversion and extraversion, according to Cain, can be summarized in Table 1:

Table 1. Key attributes of introversion and extroversion (Cain 2003)

Introvert/High Reactive	Extrovert/Low Reactive
More sensitive to novelty	Less sensitive to novelty
Less social; better at social tasks that require persistence	More social; less skilled at social tasks requiring persistence
Less impulsive	Impulsive
Unusual intensity	Average intensity
High reactive to sensory stimuli	Low reactive to sensory stimuli
Strongly affected by both positive and negative experience	Less affected by both positive and negative experience
Very good at complex, focused problem solving	Make more mistakes in complex problem solving
Sensitive to loud volume to the point of impediment	Less sensitive to loud volume, less impeded by it
Trouble expressing artificial enthusiasm	Less trouble expressing artificial enthusiasm

Suomi, in Cain (2013), suggests the following for facilitating creative learning in high-reactive learners:

- Extra time to observe before participating in ‘group activities’ such as collaborative creativity contexts
- A quiet environment, as over arousal impedes attention, short-term memory, and ability to speak on the fly
- Advanced notice about public performance or speaking, affording time to prepare
- Desensitization practice (This “involves exposing yourself to the thing you’re afraid of over and over again, in manageable doses” (126-7), and is the opposite of the ‘just jump in’ theory, which creates more harm than good for high reactive people.)

4.4.4 Culture of Personality

According to Cain, there has been a shift over the last century from a focus on one’s character to a focus on one’s personality (23-8) and along with it, a plethora of anxieties, which impede creative and personal wellbeing (20). Inner qualities, reflective of the character of individuals, such as “citizenship, duty, work, golden deeds, honour, reputation, morals, manners, and

integrity” (23), reflected in western society in the 19th century, were aspects anyone, regardless of temperament, could work on. However, as Cain explains, this *culture of character* (inner virtue) has been “jettisoned” by the current *culture of personality* (outer charm), which places value on outer qualities, best described by adjectives like “magnetic, fascinating, stunning, attractive, glowing, dominant, forceful, energetic” (23-4). This shift from character to personality was fuelled by the rise of industrial America, urbanization, and mass media, including the cult of the famous and advertising (21). One result of these social changes was that people no longer knew the people they worked with, their neighbours, their family, and their friends. They now worked and lived alongside anonymous strangers in a competitive capitalist society. The inner virtues that could serve one well in a small rural setting had no place in the urban setting. Cain explains that in order to ‘succeed’ in the fast-paced city, one had to stand out by drawing attention to outer qualities as there was now little time for people to get to know each other’s character. The culture of personality has individuals focused on how others perceive them to the point that they become “performing selves” (21).

The early 1920s gave rise to the self-help industry (taking in 11 billion dollars in 2012), which urged individuals to “meet social fear with extroversion” (38) and personality driven ad campaigns, and to apply such personal transformation even into political and educational decisions, including what personality traits student candidates should illustrate in order to gain acceptance into post-secondary institutions. The message focused on one’s popularity, aggressiveness, and extroversion as means to financial and personal success. Shyness (associated with introversion) had no place in this new culture. For learners, this is troubling. As Cain puts it, “students inhabit a world in which status, income, and self-esteem depend more on the ability to

meet the demands of the culture of personality” than meeting needs based on congruency between implicit and explicit motives. In fact, these standards for “fearless self-presentation” (31) keep escalating. It is this culture wherein our learners are directed towards self-branding and skills development for success in an economically motivated work force whose ideology is rooted in competition:

The pressure to entertain, to sell ourselves, and never to be visibly anxious keeps ratcheting up. The number of Americans who considered themselves shy increased from 40 percent in the 1970s to 50 percent in the 1990s, probably because we measured ourselves against ever higher standards of fearless self-presentation. “Social anxiety disorder”—which essentially means pathological shyness—is now thought to afflict nearly one in five of us. (31)

The culture of personality has even shaped the ideology of institutions such as the Harvard Business School, which takes pride in producing leaders “who make a difference in the world.” As a student put it, “This school is predicated on extroversion....Your grades and social status depend on it. It’s just the norm here” (44). This ideology includes “not working alone and speaking with conviction about things you may be only fifty percent sure of because often being noticed is more important than being correct” (49). Similarly, a Stanford Business School study showed that sociability was one of the most important “indicators of student success.” In the corporate world, when a major media company was asked by Cain what was meant by its attempt to attract “creative” employees, she was told, “You have to be outgoing, fun, and jazzed up to work here” (48). This is problematic in many ways, especially for introverts and for creativity. On the one hand, as Cain puts it, “high reactive [introverted] children may be more likely to develop into artists, writers and scientists and thinkers because their aversion to novelty causes them to spend time inside the familiar-and-intellectually fertile environment of their own

heads” (109). However, it is obvious that introverted people, regardless of the quality of their ideas or persons, are marginalized in a culture of personality.

4.4.5 Epigenetics

A further biological consideration, *epigenetics*, refers, in part, to the way in which some of our responses to information perceived from the environment are inherited from our closest lineage, our parents and grandparents. According to Zovkic and Sweatt (2012), “the stabilization of normal and pathological fear memories involves distinct phases that are dependent on regionally and temporally distinct epigenetic mechanisms.” They posit that this knowledge could prove to be relevant to “amygdala-dependent learning and memory” [emotional learning] (5).

Although the research has been limited to nonhumans to date, researchers believe that a particularly emotional experience that shapes one’s self may be able to be passed to the next generation in humans as well.

4.5 AFFECTIVE DIMENSION

The opening quote in this Chapter by Smith and Makie read, “one of the most important life tasks each of us faces is understanding both who we are and how we feel about ourselves” (136). The cognitive, social, and biological dimensions of the self-system, discussed thus far, help in forming a conception of “who we are,” but what of “how we feel?”

According to Duncan and Barrett (2007), “affect” is generally used to refer to any state that represents how an object or situation impacts a person” (1185). Two general areas of impact to consider are self and environment. Considering the inner aspects of affect, Brett et al. (2003) write that affect also encompasses one’s “awareness of their own and others’ emotion, empathy,

and the ability to self-regulate emotion” (1). Emotional awareness and regulation should be seen as affective development encompassed within the idea of emotional intelligence. Research findings suggest emotional intelligence “may be even more important than IQ in determining success and contentment in all areas of life” (1). In creative domains, this is connected to the way in which aesthetic learning fosters an understanding of how we feel about ourselves in relation to others and the world. Emotional intelligence involves learning how to navigate and engage with others in the world in a meaningful way. Meaning happens when experience is infused with affect. In other words, emotions “give meaning to our experiences....[and] contribute[s] to our learning what it means to feel something then do something about it” (Brett, et al., 3). Duncan and Barrett write, “affect makes important contributions to both sensory and cognitive processing...There is no such thing as a “non-affective thought”. Affect plays a role in perception and cognition, even when people cannot feel its influence” (1184-85).

4.5.1 Core Affect

Related to the term affect, *core affect* refers to the valence (happy/sad) and arousal (activation/arousal) (Russell 2003, 145). Russell writes, core affect “influence[s] reflexes, perception, cognition, and behavior and [is] influenced by many causes internal and external, but people have no direct access to these causal connections (145) (see also Chapter 6 for a discussion on the subconscious aspect of affect and motivation). Duncan and Barrett explain core affect as “a neurophysiologic barometer of the individual’s relationship to an environment at a given point in time (1185). They add:

Core affect makes external information from the world personally relevant to people, providing them with a first-person experience of the world, a fluency with [a] language so that they can describe those experiences...[and] enhances how those experiences are

encoded for future use. (1193)

This has significance related to knowledge acquisition. Duncan and Barrett explain, “We experience a world of facts rather than feelings, and affect gives us a sense of confidence in those facts....the validity of experience (both in conscious awareness and in memory) is rooted in core affect” (1197). This is relevant when considering why experiential learning is important to knowledge acquisition in creative domains, in which trust in one’s internal knowledge base plays a significant role in such areas as risk taking and improvisation. Duncan and Barrett add, “Perception without an affective component lacks the first-person, subjective quality that is the hallmark of conscious awareness of external sensory information” (1193).

4.5.2 Emotion

When does core affect manifest as emotion? Russell (2003) writes:

Emotional life consists of the continuous fluctuations in core affect, in pervasive perception of affective equalities, and in the frequent attribution of core affect to a single object, all interacting with perceptual, cognitive, and behaviour processes. Occasionally, these components form one of the proto-typical patterns [fear, anger, sadness, etc.], just as stars form constellations. (152)

Prinz (2004) writes, “Emotions are perceptions (conscious or unconscious) of patterned changes in the body” (2). Research suggests emotion includes three subcomponents: 1) *Feeling*, referring to the physiological sensation one experiences; 2) *Cognition*, referring to the “subjective thoughts that accompany the sensation;” and 3) *Behaviour*, referring to “facial display, body positioning, or a variety of other actions...related to both feelings and accompanying cognitions” (1). The implication for SCWB is explained by Oatley & Johnson-Laird, (1995) who state that emotions are “functional” in that they control organization of thoughts and beliefs/biases, behaviour, and attention.

Positive emotions help us to know what we want to pay attention to, remember or pursue; therefore, emotion can enhance or impair knowledge acquisition (Volkova, Trehub and Schellenberg 2006, 583). This is because the need for positive valence is so strong that it orientates motivation and ensuing goal choices (Schultheiss and Brunstein 2010, 16). It also plays a role in one's satisfaction (positive to negative valence) related to the perceived challenge of attaining the goal (265). Therefore, emotion can enhance or impair memory, cognition, and motivation, which in turn directly affect knowledge acquisition (Harmon-Jones, Gable and Price 2012). Banich et al. describe emotion and memory in terms of cognitive biology:

Based on the body of neuroimaging studies on emotional memory, it is evident that the amygdala and hippocampus work in tandem. It has been argued that the amygdala can modulate the encoding and storage of hippocampal-dependent memories. In contrast the hippocampus, by forming episodic representations of emotional information, can in turn influence the amygdala when emotional events are encountered. (16)

Although positive emotion plays a significant role in wellbeing, negative emotions provide a “natural counterpoint” to positive emotions. The discomfort associated with negative emotions can fuel the “impetus for creativity,” which is “predicated on some sort of dissatisfaction” (Carson 2010, 215). Similarly, the self-reflection that accompanies many negative emotions can be put to use as part of a self-mending process within creative activity (Gabora 2011, 1).

In addition, emotion plays a role in self-coherence. Campos, Mumme, Kermoian, and Campos (1994), write that emotion is “the attempt by the person to establish, maintain, change, or terminate the relation between the person and the environment on matters of significance to the person” (285). Similarly, Brett et al. describe the functional role of emotion as “judgments of the relation of objects and events to goals” (3). Lazarus (1991) suggests that the way individuals use affect/emotion to appraise the potential threat or benefit in environmental information and the

way they cope with it directly impacts wellbeing. Further, we recall that feeling safe, a basic need, is essential to meeting higher needs such as esteem, actualization, and transcendence (see Chapter 3). These needs, when met, are reflective of creative wellbeing.

In addition, emotion appraisal is an ongoing process; recognizing that the self is a work in progress over time requires continual reappraisal of the success and failure of coping strategies:

The quality and intensity of an emotional response to the appraised relationship also depends on the coping process, because what one thinks and does to alter a troubled relationship with the environment changes either the relationship or the way it is appraised, thereby changing the emotions that flow from it. (Lazarus, 51)

Part of altering a troubled relationship between the self and environment is facilitated by what Kanske (2012) describes as “conflict processing...[an] ability to show coherent goal-directed behavior, even in the presence of distraction, requir[ing] the detection and resolution of conflict, for example between opposing action tendencies” (1). This illustrates the “defining feature of cognitive control” (1). According to Kanske:

Conflict processing is directly influenced by emotion, with individual differences in temperament and emotional state, as well as the task-relevance of the emotionally valent stimuli, critically determining if this influence is an enhancing or a hindering one. (3)

Cognitive control can thus be seen as an aspect of both emotional self-regulation and mindfulness. Self-regulation involves understanding affect as a domain encompassing the “physiological, cognitive, and behavioral processes related to emotion” (Brett, et al. 2003, 1). Kanske’s use of the word *temperament* reminds us that an understanding of the biological substrate is necessary, as research by Cain (described earlier) points out. The significance of these aspects of emotional intelligence and SCWB is explored further in Chapter 7.

4.5.3 Social Emotional Learning

Social Emotional Learning (SEL), as described by the Collaborative for Academic, Social, and Emotional Learning (CASEL) in 2013 is “the process through which people learn to recognize and manage emotions, care about others, make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behavior. [It involves the] Five Social and Emotional Learning Core Competencies”: *Self-Awareness, Self-Management/Regulation, Social Awareness, Relationship Skills, and Responsible Decision Making* (9). In part, CASEL’s mission statement reads:

Our mission is to help make evidence-based social and emotional learning (SEL) an integral part of education from preschool through high school. Through research, practice and policy, CASEL collaborates to ensure all students become knowledgeable, responsible, caring and contributing members of society. (2015)

These SEL core competencies are similar to the goals of Learned Self-Regulation (LSR) (Chapter 7), and are essential goals of SCWB. All of these approaches foster and facilitate pro social skills, compassion, human centered strategies, equity and critical agency.

Aesthetic learning involves compassion, a sense of responsibility, connectedness, ability, cultural identification and empathy, just as SEL does. It is worth recalling Rasmussen’s description of aesthetic learning (Chapter 3) as “the experience of understanding; an entirety of emotionality and rationality” (Rasmussen 1990 in Austrig and Sørensen 2010). That is, “who we are” is inseparable from “how we feel,” particularly where creativity is concerned. Creative participation allows space for how we feel, not the least because it:

awakens a sense of belonging, mutuality, meaning, competence, and a caring about important things...awakens and reinforces the unique role the arts play in development, learning, and sense of well being. (Pinciotti, Gorton and Brown 2009, 6)

The words “caring about important things,” suggest that individuals need the quality of mind to regulate their feelings, thoughts, and behaviours in a way that self-transcends their own beliefs and values.

In contrast to social emotional and aesthetic reflection and learning, neoliberal reflexive processes, outcomes and states can negatively influence affect, self-perception and self-regulation. A central theme here is the fear of being “assessed, measured and ranked” according to what is described as the metric of neoliberalism. According to Beer:

Neoliberalism is not an [ideology] that that operates at a distance. Rather, through the deployment of various metrics it is able to operate at the level of our bodies and emotions. What makes neoliberalism so powerful as an art of governance is its ability to provoke uncertainty, to play with emotional and physical experience and to demarcate visions of what is worthwhile. Neoliberalism is founded on the production of uncertainty and anxiety through metrics. (2016)

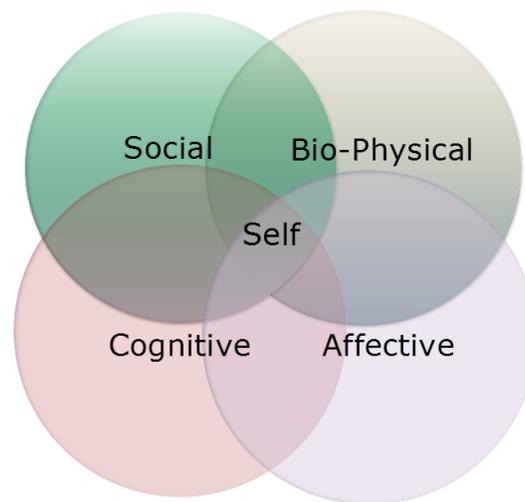
Adams (2007) also refers to a state of “chronic anxiety” that accompanies the demands, behaviours, and practices of neoliberalism and globalization (33). These include competition; self-commodification; continual external mediation, control and surveillance of learning, work, and creativity; use of summative feedback; psychosocial fragmentation; greed and seeking; and neoliberal self-reliance. These outcomes, indicative of self-system dysregulation, impair “cognitive capacity to generate solutions to...problems and reduce [the] motivation to implement them” (Lyubomirsky, et al. 2015, 9). Additionally, growing socio-economic inequality, polarization of life choices, periodization of work, commodification of education, and other states associated with neoliberalism are associated with feelings of hopelessness, loss of control, exhaustion, pessimism, self-criticism, self-blame, lack of self-worth, loss of meaning, reduced motivation, worrying about the future, all of which are characteristics of “depressive rumination” (7). On the whole, neoliberal reflexivity and social conditions undermine the biological,

affective, cognitive and social conditions of the self that are required for SCWB.

4.6 IMPLICATIONS

The question of the *self* is an age-old, daunting psychological and philosophical undertaking; however, by conceiving the self as an open, multi-dimensional system, we can now align it with initiatives for the fostering and facilitation of self-potential and creative wellbeing. This system is subject to both conscious and subconscious forces, some of which are biologically determined, others, socio-environmentally determined. When wellbeing and creativity are conceived in accordance with this multi-dimensionality, a broader awareness in creativity-related decision-making is possible, including crucial aspects of the self-system that directly impact SCWB but that may otherwise be marginalized or go unnoticed. Figure 3 below shows the interrelation and interdependence of the dimensions of the self-system. Boundaries between dimensions, and the outer boundaries of the system are permeable, which serves to emphasize the self-system is open to, and extends into, the environment. Following that is a summary of each dimension of the self of particular relevance to SCWB and a summary of contrasts with aspects of neoliberal ideology.

Figure 3. Dimensions of the Self-System



The cognitive dimension plays an important role in perception, reasoning, and intuition, general areas of cognition involved in acquiring knowledge and memory, functional identity, and self-coherence. Knowledge and memory are processed in the SMS, in part contributing to the formation of identity and maintenance of a coherent self. A coherent self is “reflective of self-esteem and a positive sense of well being” (Conway, 596), whereby there is a balance between optimism and control. External control/ management of creativity interferes with self-coherence and self-esteem.

Theories on embodied cognition and mirror systems show that cognition extends beyond the boundaries of the brain to the body and is extended by the use of tools. The crucial role of embodied cognition in consciousness, holistic thought, and creativity is being dissolved within a neoliberal society, replaced by a system in which prioritization of the rational and virtual over the subjective and real confines individuals within boundaries of their heads, unconscious of

experiencing things in the real world. First-person, real-world experiences are a hallmark of acquiring meaning, knowledge, and memory, and of negotiating and managing real constraints in the social and natural environment. Therefore, one must ask, “What is lost when face-to-face-contextual learning is being replaced at such a ravenous pace by virtual learning?”

The 21st century skills needed to participate in the knowledge economy emphasize speed, efficacy, within time-space compression, externalized memory, distributed cognition, networking, and collective intelligence. This emphasizes knowledge that is “accomplished rather than possessed” (Jenkins, 65). The emphasis on knowledge of the bits and pieces is meaningless when the wisdom of the whole is missing. McGilchrist writes:

[T]he world we now inhabit [operates] as if the left hemisphere, which creates a sort of self-reflexive virtual world, has blocked off the available exits, the ways out of the hall of mirrors, into a reality which the right hemisphere could enable us to understand. In the past, this tendency was counterbalanced by forces from outside the enclosed system of the self-conscious mind; apart from the history incarnated in our culture, and the natural world itself, from both of which we are increasingly alienated, these were principally the embodied nature of our existence, the arts and religion. In our time each of these has been subverted and the routes of escape from the virtual world have been closed off. An increasingly mechanistic, fragmented, decontextualised world, marked by unwarranted optimism mixed with paranoia and a feeling of emptiness, has come about, reflecting, I believe, the unopposed action of a dysfunctional left hemisphere. (2009, ix)

Aspects of this troubled relationship between individuals and the environment include stressors such as basic needs being thwarted, psychosocial fragmentation, chronic reflexivity, inequity and inequality, a culture of extroversion and personality, and a culture of distraction, time-space compression.

The social dimension of the self-system incorporates the idea that one’s sense of self is largely defined in relation to one's social environment and that humans are purposely social. Further, our cognitive processing has evolved to process the horizontal transmission of cultural knowledge

between individuals in a social environment. As discussed, this is traditionally the way shared cultural knowledge is transmitted in creative domains. Shared cultural knowledge and memory provide the functional constraints that shape identity, coherence, and agency. Self-identity is functional in that individuals adopt roles, which are useful in the management of goal directed behaviour within social contexts related to needs, beliefs, goals, and values. Theories of wellbeing and aesthetics introduced in Chapter 3 explained that independence and freedom take place in and against a shared cultural framework. A sense of mutuality, belonging, competence, and meaning occur in relation to this framework and contribute to a reciprocal sociocultural homeostasis whereby there is an inner/outer balance to self-identity.

What are the consequences to the self when individuals are disembedded from culturally constructed schemas? Cultural disembedding has been suggested to result in self-identity becoming a chronic reflexive process in which the outer/social self is “produced” and which takes place in isolation (M. Adams, 43). Mutuality is replaced by self-preoccupation (J. E. Davis, 42), belonging by self-reliance (Enoch 2007), self-endorsed competence by evaluation and judgment by others (Amabile 1992, 79), and subjective meaning by utility (Fukuda-Parr 2013, 167). These socially maladaptive traits may result in restlessness and isolation, (Harvey 2005, 2), commodification of the self (J. E. Davis 2003, 42), competitiveness (Deci 1971, 114), and autonomy. When these are the experiential outcomes, others integral to SCWB such as self-trust, self-acceptance, self- and other-compassion, openness to new experiences, mindfulness, and critical agency dissolve.

Research suggests we are biologically programmed to exist in a social environment. However, the human brain has a cognitive capacity of a hundred and fifty meaningful relationships it can

maintain, and this also extends to virtual networked relationships. However, social networking and massification efforts associated with globalization impact “creative intelligence,” hindering “effective, dialectical interaction of an individual with his or her environment and the intersubjective understandings among members of a community” (Moran and John-Steiner 2003, 9). Further, the scaling up of populations includes continual local cultural assimilation, and acculturation, all but effectively contributing to fossilization of cultures needed in providing frameworks for identity, coherence, agency, and use-value creativity. This intersection of the physiological, cognitive and social dimensions of the self is a critical area for SCWB.

Another biological consideration is temperament. As shown, temperament predisposes individuals to fall somewhere along a continuum of high to low reactivity to internal and external stimuli/stressors. It has been shown that introverts are, in general, creative; however, the current culture of personality marginalizes their participation in the culture. Self-commodification values run contrary to what facilitates self-actualization, self-esteem and SCWB: non-competition, non-judgment, calm, mindfulness, acquiring knowledge for its own sake, intrinsically motivated creative behaviour, and independent learning and thinking. Maslow suggested that in order to be self-actualized and self-transcendent (conditions for SCWB), individuals must:

drop masks, dropping our efforts to influence, to impress, to please, to be loveable, to win applause. If we have no audience to play to we cease to be actors. With no need to act we can devote ourselves, self-forgetfully, to the problem. (63)

In terms of the affective dimension of the self, it has been suggested that *all* thought, conscious or not, is affective thought. Emotions are “functional” in that people move toward or away from things depending on emotional meaning and self-coherence; thus they control organization of thoughts and beliefs/biases, behaviour, and attention. Further, affect provides a first-person,

subjective quality, the hallmark of conscious awareness of external sensory information. Linking affect and perception is an attribute of aesthetic learning within creative domains. In a world where left brained “objective common sense” and virtual reality are the norm, and where motivation to act is externally derived (see Chapter 6), aesthetic learning and SCWB are undermined.

Regulation and management of emotion are important in maintaining adaptive thoughts and behaviour, considered indicators of emotional intelligence, which in turn has been suggested a better predictor of life success than IQ. This is consistent with suggestions put forth in Chapter 3 related to SCWB and will be discussed further in Chapter 7 (Self-regulation). Behaviour traits related to SCWB that are indicative of *affective growth* (as transformative creative experience) are self-trust, self-acceptance, mindfulness, critical agency, self-regulation of emotions thoughts and behaviour, openness, intrapersonal development, interpersonal competence, empathy, compassion, humanitarianism and civic engagement, willingness to grow, self-expression, intrinsic motivation, and free imagination. This emphasis on affect in SCWB is also found in aesthetic learning as defined by Austrung and Sørensen who suggest, “Aesthetics are a sensuous symbolic form that contains an interpretation of ourselves and the world and which is particularly capable of communicating from, to and about emotions” (2012). Unfortunately, traits required in the knowledge economy are indicative of maladaptive affective cognition and behaviour. Paradoxically, these maladaptive outcomes come by way of the pursuit of happiness. The neoliberal endless seeking of material wealth, status, and attention expose a paradox between restraint and freedom. These maladaptive behaviours are associated with depression and anxiety and can undermine creative risk taking, openness, and deliberate emotional and spontaneous emotional creative thinking (Dietrich 2004, 1020).

The hyper self-concern of the neoliberal self results in a crushing under the weight of self-scrutiny, self-commodification, self-reliance, self-censorship, and self-production. Unlike the reflexive processes associated with social emotional learning, pursuing “who we are and how we feel about ourselves” (Smith and Makie, 136), the construction of our self-identity with reference to the world, should not be a chronic, self-absorbed, isolating process. It should not create “chronic anxiety” or “depressive rumination.” Nor should it have to be comfortable; it is a creative challenge of the highest order requiring mindful critical agency. As Gilroy asserts, turning away from the problems of the world in the construction of the neoliberal self:

all too often culminates in the substitution of an implosive self and therefore antisocial form of self-scrutiny for the discomfort and the promise of public political work which does not assume either solidarity or community but works instead to bring them into being and then to make them democratic. (Gilroy in MacGregor Wise 1997, 159)

5. CULTURE AND CREATIVE DOMAINS

What external constraints, whether societal, physical or temporal, play a role in fostering or suppressing creativity and wellbeing? First, this chapter will explore the cultures as socially constructed processes, interdependent with wellbeing. Central to this discussion is the idea that creative traditions or domains should be conceived of as cultures. This positions creative domains as being subject to the forces that are, according to the research, exerted on other types of cultures. Thus creative domains, like other cultures, may be viewed as being concerned with individual and group wellbeing, sustainability, and progress. Secondly, the impact on creative wellbeing of physical and social environments and external ideologies will be explored. Finally, given that all creative activity takes place in time, the interrelationship between time and creative wellbeing will be discussed. The chapter will reveal how external forces impact freedom, self-identity, self-determination, sustainability, equality, provisions, resources, and choice—known contributors to creativity and creative wellbeing.

5.1 CULTURE AND CREATIVE DOMAINS AS SOCIALLY CONSTRUCTED PROCESSES

Holder (2006) writes that culture is important in “determining the field within which a person acts” (92). Similarly, Gillett, Gavin, and Savelli write, “social structures....shape the experiences of individuals who reside in them” (2016, 19). According to Eisenberg (2006), conceptualizing culture as a social construct aids in distancing current research from older anthropological essentialist definitions that tend to render culture homogeneous, void of agency, static, and as having clearly defined borders. If culture is instead a socially constructed *process*, it can account for dimensions such as 1) an “activity or way of life”; 2) being “imperfectly bounded” with overlapping ideologies and geographies (varying degrees and manifestations of heterogeneity);

3) an ongoing “transmission” and maintenance of heritage and/or traditions from one generation to the next; and 4) “knowledge [and memory] by learning” rather than “intuition” (Eisenberg 2006). These overlapping and interdependent dimensions contribute to the functionality of culture as a purposeful, dynamic domain, used by individuals and groups for the ongoing management of, and navigation in, everyday social interactions, that is, towards both a sense of and expression of belonging, individuality and self-identity.

Terms used in the literature in relation to this process include *mental constructs*, *social constructs* (Rees 2011, xi), *maps of meaning* (Jackson 2003), and *collective representations* (Eliasoph and Lichterman 2003). Rees describes mental or social constructs as systems that “have no physical presence...[and that] do not exist in the natural world” but that are “fabrications” of the human mind [and] are “some of the most important things in life” (xi). He goes on to say that social constructs “determine how we perceive reality” (xii). Rees’ social constructs and Jackson’s maps of meaning both seem to refer to perception. Jackson writes, “Maps of meaning refers to the way which we make sense of the world, rendering our geographical experience intelligible, attaching value to the environment and investing in the material world with symbolic experience” (i). Eliasoph and Lichterman write, “collective representations are meaningless in themselves, but that a focus on “culture in interaction” helps to illustrate how the same widely shared symbols, stories, vocabularies, or codes make different meanings in different settings” (782). Noting that cultural lenses have a profound influence on perception, Eliasoph and Lichterman write:

“Culture” becomes publicly available and shared in group settings. The meaning of culture depends in part on what it means to participate in a group setting that filters that culture. The concept of culture in interaction brings group life squarely into cultural

analysis. To understand culture, we need to know how groups put it to use in everyday life. (784)

Critics of social constructionism point to the fact that although social constructs account for subjective reality, by which groups of people create and function, they are neither effective for nor do they account for the exploration of objective reality independent of this framework (Boghossian 2001, 3). The complementary theory of *critical realism* is used to refer to objective reality that exists independent from subjective human experience (Alvesson and Sköldbberg 2009, 15). For example, mountains, oceans, ostriches, ants, and people exist independently from any subjective meaning humans ascribe to them through social constructs. Social constructs are self-referral systems, used to gain insight into ways that groups of people create and find “meaning” in perceived information, and how meaning is “negotiated, sustained, and modified” (Glaser 2012, 40).

Alternatively, according to Boghossian, unlike social constructs, “science delivers knowledge that everyone has reason to believe...[it delivers] true, or approximately true knowledge of the structure of an independently existing reality,” regardless of ideology (10). Although social constructs play a role in the “context of scientific discovery” and “context of scientific justification,” they are irrelevant when it comes to scientific claims which are based on “evidence and reason” (6). Put differently, although at one time sailors did their utmost to stay away from the earth’s edge, the world, regardless of beliefs, values, and other social norms, has been proven to be round. In essence, objective realities co-exist with subjective, socially-constructed realities; thus cultures can be, and have been, expressed as socially constructed processes and as critical realities.

One conception of the interdependence between culture and creativity is expressed by Gauntlette (2013): “Cultures are the context in which creativity occurs” (5). For example, socially constructed frameworks provide the lenses through which perceptions of material and immaterial objects and their related processes are shaped into assumptions, beliefs, norms and values regarding creativity. However, it could also be suggested that the relationship between wider scope cultures and creative domains (e.g., any of the arts) is reciprocal and interdependent. Dance, for example, may occur within a cultural context, but dance may also be a context in which culture occurs or is transmitted. To take the interrelationship a step further, creative domains could be described as socially constructed processes analogous to cultures or could themselves be described as cultures—fluid, permeable domains in which knowledge and memory are acquired through learning and transmitted across time between generations. As with culture, viewing creative domains as socially constructed processes discourages essentialist conceptions of them, which tend to freeze what are actually dynamic complex processes.

Culture and creative domains could also be understood as social *systems*. Laszlo and Krippner (1998), write that social and psychological systems demonstrate “resistance to boundary identification” (49) and form control functions that facilitate “the operation of the system” and that may include ethical and other external environmental provisions that “defend the system from external threats” (Feldt 1986). Further, creative domains, like culture, ought to be respectfully understood as internally contested and influenced rather than solely subject to adjudication and assimilation by external sources and influences.

This paper, therefore, takes the position that creative domains are cultures and are socially constructed processes and systems having the following characteristics: 1) being an activity or way of life; 2) being imperfectly bounded; 3) having an ongoing transmission and maintenance of heritage and or traditions; and 4) possessing knowledge by learning. This means that, as with all social constructs, subjective meaning is part of the creative domain, as is acknowledging that objects of creativity exist objectively and independently from the social constructs that give them meaning. The following sections will examine each of the four characteristics above in turn and the interrelationship between culture and identity.

5.2 CULTURE AS AN ACTIVITY

Conceiving of culture as an activity provides a fluid and malleable medium for the use in both “managing” social situations and “organizing action.” This includes its conception as a fluid medium for the ongoing construction and reconstruction of self-identity in relation to norms, beliefs, and values that affect active “judgements” (Tileagă, 88-9).

Conceiving culture as an activity helps researchers to move away from using essentialist traits, which tend to be inscrutable. Inscrutable identity traits are problematic because they tend to produce static, reified, ahistorical representations, which can fall subject to fragmentation or “adjudication through majority eyes” (Eisenberg, 41-2), and which tend to “artificially freeze a fluid and malleable phenomenon...isolating cultural means by which cultural practices are reshaped” (41). In this sense, essentialist conceptions of culture can undermine the growth and progress of those whom they were meant to serve by binding them to codified descriptions of practice. Instead, recent researchers acknowledge that “culture changes” (Eisenberg, 41) (Gauntlette, 5). This provides space for the aspect of culture described by Marcus and Fisher

(1986) as a state of “flux, in a perpetually historically sensitive state of resistance and accommodation to broader processes of influence that are as much inside as outside the local context” (78).

Similarly, Eisenberg believes culture is an ongoing “internally contested” phenomenon, with ongoing accommodations and concessions being made to make room for new ideas, even descendent ones (41). A focus on how a “practice [activity] serves to sustains a culture” (42) emphasizes that cultural evolution is or should be a product of self-determination rather than a result of assimilation, fragmentation, or marginalization by an external majority. Likewise, a creative domain is well served by being viewed as self-determined, internally-contested activity because it emphasizes participation in the creative process as a means of sustaining and revising fluid creative practices. It also emphasizes that sharing, contesting and revising learned domain knowledge is an activity among people and generations in the group, in linear time.

The story of Algonquin musician Beverly Souliere can be used to illustrate activity as a crucial dimension of culture and creative domains. Souliere is the lead singer of Women of Wabano, a women’s hand drumming circle. Previously, she had spent over thirty years feeling as if she had a void in her life, the absence of heritage, which she describes as “having no cultural upbringing at all” (Hoefnagles 2012, 198). Over time, her curiosity led her to seek out her aboriginal roots and she began to attend “powwows,” “full-moon ceremonies,” “sweat lodges,” and so on. She eventually discovered the drum circle, through which she practiced not only music-making but also the drum-making that she described as the “most profoundly spiritual experiences of my life”. During the act of drum-making, she was “immersed in [her] own thoughts” and wondered what “this drum [was] going to bring into [her] life...it was a profound experience.” She gained a

respect for the instrument as having the “energy” of a “once living thing” (200). The performance of the music she described as “cathartic...a kind of cleansing.” It represented emancipation of women who have been “disenfranchised in [their aboriginal] culture” (202).

The songs the group performs assist women in “finding [a] voice” that had been lost. The song forms, *call and response*, facilitate each woman’s being the lead singer in turn. Souliere describes that “for a woman who’s been oppressed, who has not been given permission to say “no,” to all of a sudden find herself in a situation where she’s expected to sing a full line of music, solo, by herself, with a group of her peers, standing around her watching her, it is incredibly intimidating.” However, she explains that through participation, there is an “incredible teaching in letting go...of your fear...your worry....your shame background...of embracing the moment” (203). Souliere explains the woman’s drum circle symbolically “teaches” that we can “realize our goals,” “reshape ourselves, physically, mentally, and spiritually.” She describes the self-transcendent aspect of the tradition by stating that through teaching others, the practice “transforms you” (204). Souliere’s story can be seen as encountering culture on many different scales: first, as an Algonquin; second, as woman; third, as a teacher; fourth, as a minority; fifth, as a creative process providing the constraints for transformative liberating experiences that include fostering agency towards both a sense of independence and belonging. Participation in the culture and the creative domain is inseparable from the activity.

5.3 CULTURE AS IMPERFECTLY BOUNDED

Describing culture as a fluid, relational and revisable activity provides space for internal and external influences. As such, culture is imperfectly bounded, subject to geographical and ideological influences. As Wolf (1982) asserts, culture as imperfectly bounded has “multiple and

branching social alignments....the concept of a fixed, unitary, and bounded culture must give way to a sense of fluidity and permeability of cultural sets” (387). MacGregor Wise (1999) writes, “what we might consider local or traditional culture has been a hybrid culture all along, and ... the global culture that it is faced with is far from uniform or universal” (25). Similarly, the UNESCO World Commission on Culture and Development (1993) stresses that within a healthy culture there is “respect for differences....for equal dignity and diversity, to value equally the rich potential and vigour of everyone, on the resources of cultural exchange and on intercultural dialogue” (2). Therefore, cultural borders, be they geographic or ideological, do not create islands; they overlap. Establishing culture as a socially constructed perceptual activity with imperfect boundaries helps to explain how perceptions of tangible and intangible information from the environment can vary widely not only from culture to culture but also between groups with differing ideological views within a single culture.

At times, immaterial ideological culture can even penetrate socio-geographic culture. For example, the suburbanization of North American cities after WWII was illustrative of bureaucratically-formed, socio-geographic and architectural living environments that were, at their “best,” described as “efficient,” and “rational.” It has been argued that the suburbs were engineered to reflect the needs of post-war, contemporary middle class culture, giving people the ability to escape the instability of “multi-cultural” inner city life by retreating to the safety and comforts the suburbs offered. However, at their worst, they have been described as “segregated,” “mono-cultural,” “conformist,” “anti-heroic,” “boring,” and even “deadening” (McDonald 2009, 33). Such descriptions help to understand the assemblages that resulted in a new socio-cultural class: the teenager. The proliferation of public schools, new child labour laws, and the ensuing

leisure time that followed the war, combined with the social isolation and conformism of the suburbs, have been effectively argued to have motivated adolescents to seek forms of escapism (33) in an attempt to express their creativity. Science fiction, post-romanticism, and medievalism provided such vehicles for escapism, and some music expressing these themes appealed to many young male suburbanites. For example, Canadian rock band Rush's *Subdivisions* used the middle-class adolescent as a subject vehicle for many lyrics, in turn providing suburban youth with "a fantasy community of risk" (33). A "masculine" "rebellious" attitude, along with "dressing down" (adopting "working class" youth dress) and music, helped express their "values, desires, and anxieties" (33). This adoption of working class and post romantic attributes was a non-conformist attempt to separate teens from the static culture of their parents.

This illustrates the idea that cultural identity is constructed and reconstructed on an ongoing basis through "every human interaction on the basis of changing historical circumstances" (Eisenberg, 41). The permeable nature of culture "inherently" facilitates "relation[al]" influences and constant "revision" (41). This process has been termed *self-categorization*, which refers to the way in which individuals, through their comparison to others, associate themselves with a cultural group, and develop a sense of "belonging" that contributes to "self-esteem."

The permeability of cultural boundaries, including those of creative domains, can either positively facilitate or negatively undermine progress, growth, and self-actualization, depending on factors such as equality or polarization. In addition to other cultural and geographical influences, ideologies and hegemonies are two important types of systems that permeate culture.

5.3.1 Ideologies

As with most other socio-cultural terms, *ideology* has no single agreed-on definition. Further, definitions in use are “not always compatible” and serve many different uses (Eagleton 1991, 1). However, generally speaking, ideology has been described as a system “of fundamental beliefs shared by a group and its members” (van Dijk 2005, 7). The shared beliefs of ideologies are “associated with the characteristic properties of a group, such as their identity, their position in society, their interests and aims, their relation to other groups, their reproduction, and their natural environment” (11). Eagleton points out that ideologies are both “illusions and mediums through which social actors make sense of their world” (2). This statement emphasises that knowledge and truth are relative, not objective, and are subject to the needs of those for whom they function. This description of ideology is analogous with understandings of culture as a social construct.

Durkheim (in Eagleton 1991) writes that ideology involves “the use of notions to govern the collection of facts rather than deriving notions from them” (Eagleton, 3). “Neutral” understandings of ideology focus on the concept as a “body of ideas characteristic of a particular social group or class” (Eagleton 1991, 2) without the implication that they are either true or false. Other understandings of the term range from epistemological (e.g. the rightness or wrongness of ideas) to sociological (“functions of ideas within social life”) (3). According to Minar (1961), ideology has been used to describe the role ideas “play in the structure of organization...in “human-social interaction...[as] meaning [towards] persuasion...[as] locus of social interaction..., [as an] internal logical structure...within a set, [with certain] (usually normative) content.” Mullins suggests ideologies should have four basic abilities: “[have] power over cognition...be

capable of guiding individual's evaluations...provide guidance towards action...[and] be logically coherent" (317).

Additionally, within local cultures and across society, there can exist many different ideologies regarding attitudes about any number of issues, such as gender equality, religion, or the environment, which are founded on shared beliefs. "Ideologies...are not socio-cultural, and cannot be presupposed to be accepted by everyone" (van Dijk, 14) within a culture or society. However, according to Barker (2012), for subjects of a particular ideology, "ideology is [both] lived experience...[and] "social cement...used to bind together and organize a bloc of diverse social elements" (67). In this light, ideologies are the engine of a group's social memory and often "give rise to difference of opinion, to conflict or struggle" (14).

5.3.2 Hegemonies

As with all social constructs, ideologies range from socially desirable (e.g., equality for all) to undesirable (e.g., racism). According to Tyson (2006), "undesirable ideologies promote repressive political agendas and, in order to ensure their acceptance among the citizenry, pass themselves off as natural ways of seeing the world instead of acknowledging themselves as ideologies" (56). The "maintenance" and "reproduction" of ascendant ideology as "authoritative meanings and practices has been called hegemony" (66). Leclau and Mouffe (1985) have thus revised hegemony to mean "a field of contestation in which multiple descriptions of the self and others compete for ascendancy" (Barker, 71), which results in the supremacy and maintenance of a dominant voice.

Gramsci (1971) writes that the “common sense [rhetoric of dominant ideologies is]... continually enriching and transforming itself...with scientific and philosophical ideas...[and] creates the folklore of the future, that is as a relatively rigid phase of popular knowledge at a given place and a given time” (362). Views that transcend local cultures, such as dominant societal ideologies, also impact the reflexive process. For example, a dominant ideology such as globalization can be viewed very differently depending on whether it is seen through a capitalist or socialist lens. Through a capitalist lens, the process of globalization promotes positive aspects of global citizenry, as expressed by Bauman (2004): “For the first time in history everybody’s self interest and ethical principles of mutual respect and care point in the same direction and demand the same strategy...[H]umanity never had a better chance” (88). Alternatively, globalization seen through the lens of social critics, such as the Global Ecological Integrity Group, is “the origin of global warming, global pauperization, global de-humanization...” (Westra 2011, 29).

5.3.3 Articulations and Assemblages

Neoliberalism and globalization emphasize net economic progress, and market-driven assessment of value. Given the discussion of progress, agency and reflexivity above, it is clear that the social engineering discourse associated with neoliberalism and globalization, in spite of claims to the contrary, has been shown to have a profound and negative impact on many cultures, on creativity and on wellbeing.

The ascendance of neoliberal rhetoric and practice has been underpinned in the west by state policies reflecting a paradigm shift from a previously dominant Keynesian ideology. A major indicator of this shift is the move away from the welfare state to the primacy of the market in influencing socioeconomic policy decisions. However, neoliberalism, according to Bradford

(1999), lacks the “cross-class and interregional accommodation that underpinned Keynesianism” (33). As such, McBride (2005) writes, “this makes it vulnerable to ‘power-holders’” (203). Cohen (2000) asserts, “Uniform economic policies greatly aid in the mobility of capital, but they also greatly undermine the power of people to shape societies in their own interests” (207). This type of social change is contingent on maintaining implicit relations, *articulations*, of elements, i.e., economic-technology-policy, and is explained in cultural studies as a theory of assemblage, articulation, agency and contingency (Slack and Wise 2015).

Slack and Wise describe assemblage as “a particular constellation of *articulations* that selects, draws together, stakes out and envelops a territory that exhibits some tenacity” (157).

Assemblages are contingent on articulations, referring to “the connection of different elements that when connected in a particular way, form a specific unity” (152). Articulations can be tangible, e.g., computers, or intangible, e.g., rhetoric. Assemblages, such as technology-economics-policy-creativity, and time-space-technology, “draw attention to the contingent relations among practices, representations, and experiences that make up the world” (151). Slack and Wise further define the term assemblage writing that they are:

maps of power relations, which in turn work to shape and transform political and economic possibilities and relation of power and agency. The work of assemblages privileges some populations over others, privileges some possibilities over others, and distributes agency unevenly. (166)

Assemblages are “prescriptive” in that they “shape possibilities of behavior and thought [agency], and language” (201). In other words, they are intermediaries through which agency is shaped before it is exercised. The troubling aspect of the prescriptive nature of assemblages is that unlike other prescriptions of equal power, namely “laws,” they are “rarely deliberated.”

Further, assemblages are “discriminatory” (203); therefore, agency is not an equally distributed good. This is troubling, according to Slack and Wise, who suggest we seem oblivious, “sleepwalking through” these changes (167), reminiscent of the fish who responds to inquiries about the water temperature with “What water?”

The inclusion of a contingent assemblage subsystem in the SCWB model recognizes their power to affect discourse, practices and representations in creative domains, changes that serve power-wielding choice architects but that often have unforeseen negative effects to human welfare. Consequences of assemblages contingent on the articulations of neoliberalism and globalization discussed below include increased individualism and self-reliance, the “periodization of employment” (Adams, 33), competitiveness, homogeneity, growing inequality, polarization, increasing technological determinism, gentrification and suburbanization of cities, and unsustainable consumption and depletion of natural resources.

First, the process of globalization, with unprecedented speed and upheaval, has severed ties to local cultural traditions. Specifically, it has been argued that globalization results in “psychosocial fragmentation,” which includes a “disembedding” of the “reflexive process” from “traditional scripts...local affiliation...[and] common experience” (Adams, 43). In this regard, individualism and self-reliance, often seen as positive traits, are out of balance and become isolating. Adams describes disembedding as “the lifting out of social relations from local context and their rearticulating across indefinite tracts of time and space” (47). There is an increased use of technology in this process, not as an “agent,” but as an “economic, political, and cultural” tool (Slack and Wise, 179) that is consistent with neoliberal rhetoric.

This technology-time-space assemblage has effects on the self in that it increasingly supplants the role of local cultural relations in the construction of self-identity:

Even interaction which is still localized is shot through with broader globalized dynamics; there is a ‘fostering [of] relations between “absent” others, locationally distant from any given situation of face-to-face interaction...place becomes increasingly phantasmagoric: that is to say, locales are thoroughly penetrated by and shaped in terms of social influences quite distant from them’ (Giddens 1990, 19). The procedures, services goods and activities generated in our relations with social institutions are reconfigured in terms of abstract, globalized symbolic meanings and expertise, which is then re-presented to the individual as an element to be chosen in the reflexive project of their own individualized identity. (47)

Adams suggests that one’s “socially prescribed biography is transformed to a biography that is self produced” (47). With this supposed liberation from cultural scripts comes the burden of “autonomous self-construction” within an “abstract, impersonal system” (47). Generating a meaningful sense of self within a post-traditional neoliberal framework becomes a cognitive “chronic reflexivity” project, generating “pathological” behaviours such as “greed” and “narcissism.” Adams attributes this in part to late capitalist narcissism, a “disintegration” of the “primary interpersonal relations necessary for the development of autonomous selfhood... [Replaced by] commodified ones” (114). Much research shows the dominant neoliberal discourse on conscious rational dimension of reflexivity excludes crucial space for other, less objective, subconscious or tacit dimensions of the reflexivity process: affective (Harmon-Jones, et al., 2011), social (Ryan 2009), and biological (Posner, Russell and Peterson 2005).

The result is a portrait of an agent based on oversimplified wishful thinking, a caricature based on modernist ideology in which the agent is reflexive, able to monitor his/her actions, skilled, and knowledgeable at all times. (Mestrovic 1998, 78)

Adams asserts the “unconscious processes impact substantially on the more rational and accessible aspects of consciousness; there is always emotional and irrational seepage that eludes the enunciation of such rational positions” (52). Further, the corporeality of humans naturally

puts complex “limitations” and “choices” on the reflexivity process. Corporeality, with the embodiment of the self and its placement in an environment comes with the possibility of infinite, unpredictable, and sometimes irrational, consequences. The concept of corporeality also includes subconscious internal motivational processes (Gable and Hart 2013; Posner, Russell and Peterson 2005; Davis 2003;); intelligences (“spatial, logic mathematical, bodily-kinesthetic, linguistic, musical, interpersonal, intrapersonal” (Jeffrey 2006, 9) and abstract intelligences; learning styles (Godwin and Uduak 2013); temperament (Cain 2013); and epigenetic factors (Zovkic and Sweatt 2012, 5), that all play a role in reflexivity. Just as with cultures, the individual self-identity process is a complex multi-dimensional fluid, permeable, dynamic lifelong activity with interdependent internal and external aspects to consider.

Finally, Adams, considering power and inequality in relation to reflexivity and agency, emphasizes that reflexivity is not an “unequivocal good.” He points out that within the framework of “hegemonic capitalism,” where power and privilege are attributes of mostly “white wealthy middle aged men,” the freedoms, resources, and provisions needed for individual “agency” are not equally available to all (149).

One of the rising and troubling trends of neoliberalism is the periodization of employment, a dramatic shift from lifetime employment of days gone by, has brought with it chronic “anxiety”, “loss of control” and “exhaustion” (33), rather than the professed freedoms of neoliberal rhetoric. These challenges can undermine attempts by individuals and groups to address health and wellbeing related behaviours. “Optimism,” an essential ingredient in wellbeing seeking behaviours (Gillett, Andrews and Savelli, 19), can be thwarted by pessimism. When the basic

need of security in employment is replaced by constant worry, fear thwarts self-actualization, let alone self-transcendence and wellbeing (Maslow 1943, 395). In a neoliberal society, as Gilbert (2009) puts it, “Shame and self-criticism are transdiagnostic problems” (199). Gillett, Andrews and Savelli further explain the problem of neoliberally driven “income inequality” as “associated with reduced social cohesion and reduced social trust” (181). According to MacGregor Wise (2008):

If we conclude globalization only matters when it affects me, then we have fallen prey to the neoliberal ideology that places all social, economic, political agency on the shoulders of the individual, to see people as individuals reduces them, I feel. (151)

Sugarman’s (2015) description of the ways in which periodization of employment affects individuals can be used to expand on Adams’ words:

Traditional values are undermined as we rely increasingly on the authority of legalistic contracts and less on trust, promises, and long-term contracts, such as those that once existed between employers and employees. In a context of work built on short-term contracts, flexibility, and mobility, it becomes difficult to preserve the value and viability of long-term commitments and relationships. A society of individuals frequently switching jobs, relocating, and preoccupied with personal risk and self-interest, is conducive neither to stable families nor cohesive communities. (106)

It is increasingly difficult to maintain coherent self-narratives when adrift in time and space. In addition, virtual relations are replacing face-to-face relations. Short-term and virtual relations fragment the sustained self-narrative, needed for self-coherence and the development of self-transcendent values such as a sustained sense of mutual commitment and responsibility. Sennett (1998) asks, “How can long term goals be pursued in an economy devoted to the short term?” (10). For example, periodization of employment supplants the cultural notion of a career and creates anxiety about whether one’s current housing, workplace, or relationships are worth investment.

Additionally, placement within a social hierarchy, i.e., status processes, can fuel “chronic stress,” experienced when initial stress, such as that felt through the periodization of employment, leads to secondary stressors (Pearlin and Staff McKean 1996, 133). The assemblage of creativity-politics-economics-technology is linked to the negative effects of such status processes. Specifically, within neoliberal society, status processes include the ranking of individuals according to relative value in the economy, such as in the Creative Class Group: Creative Core, Super Creatives, Creative Class, manufacturing, service, contract worker, etc. (see Appendix B). By definition, this involves prejudice, discrimination, and devaluation of individuals and groups. As a result, individuals and groups placed low on the social hierarchy are disadvantaged and may be “less likely to succeed in conventional pursuits” as a result of stereotype threat. That is, the status process results in “anxiety...about confirming the negative stereotypes of the groups [to which] they belong” (McLeod 2015, 155-56) and about confirming the judgment of their relative value.

Identity processes can also result in negative effects to health, as there are fewer opportunities and resources available for those lower in the social hierarchy to confirm their self-endorsed identity. The resulting identity conflict, or “identity disconfirmation” is associated with negative emotions and reduced positive mental health because of the sense of self-worth and “meaning people attach to objective life conditions” (McLeod 2015, 156-57). Without a positive sense of self-coherence, the potential for goal pursuit, memory, and ultimately the domain/goal mastery required for creativity, is effectively diminished (see 4.2.2, Self-Coherence).

5.3.4 Ideology, Hegemony and Creative Domains

How do dominant ideologies or hegemonies relate to the permeability of creative domains? An example is found in the jazz music of the 1960s. There was a widespread interest in India by westerners looking for a new attitude towards spirituality and the world. This is not to say that some elements were not filtered, “degenerating into little more than commercial enterprise” (Lavezzoli 6). However, there were also many westerners with a genuine respect for what they heard and a desire to understand its cultural context. At the same time, jazz musicians were turning away from white religion in an attempt to sever ties from a Christian church they viewed as responsible for many injustices; so many jazz players converted to Islam and began studying with Indian master musicians (Berendt 2009, 24). Decades earlier, North Indian Sufi and musician Inyat Khan, had believed the transformative powers of Indian music could help the Westerners as well as Indians, saying in *The Mysticism of Sound and Music*, “No part of the world can deny the divinity of music...In the Vedas of the Hindus we read: ‘sound, being the beginning...’[, and] in the bible we read ‘first there was the word and the word was God’...this shows us that the origin of the whole creation is sound” (Farrell 154-158). Opening up to the worlds’ cultures, jazz musicians such as saxophonist John Coltrane and trumpeter Don Cherry began to “express an all-embracing love, pan religious ecstasy and cosmic ascension” (Berendt, 25-26). This process can be seen as syncretism, “the process whereby two or more independent cultural systems, or elements thereof, conjoin to form a new and distinct system” (Littleton 2005).

“Worldviews, social and political ideologies” permeate even “academic paradigms” (Rees, xii). In Canada, for instance, recent academic policies regarding creativity have been in large part

shaped by rhetoric associated with the neoliberal economic marketplace. One national policy report recommends that education and worker training should be focused on “new knowledge competencies—necessary to spin creative ideas into commercial products and services—[which include] the need for multi-skilling and cross-disciplinary practices required to fuel the creative economy” (Conference Board of Canada, 37). The report stresses that these skills are “not limited to those involved in R&D [research and development] or marketing. These skills are required across the workforce” (38-9). Critics of this commercialized approach to creativity emphasize the negative consequences, including the previously mentioned “disembedding” from cultural scripts that lead to “psychosocial fragmentation” (M. Adams, 47) and social and economic marginalization of those people and domains that are not economically “useful,” e.g. culture-based artists, manufacturing and service workers, indigenous cultures, free thinkers, and academics) (Brückner and Lederman 2015; Klinenberg 2013; Easterly 2007, 773; Donegan 2006, 2). Where creativity is concerned, still others add that the consequences of this academic paradigm include diminished natural curiosity and exploration, reduced value placed on learning for its own sake, decreased creativity and, ultimately, reduced wellbeing (Marwick 2013; Pinciotti, Gorton and Brown 2009, 6; Davis 2003; Peters 1997).

With reference to international development, the United Nations Creative Economy Report of 2013 asserts:

The vitality of artistic creativity is necessary for the development of vibrant cultures and functioning democratic societies (40)...It suggests economic and social development be inclusive...it points out recent policies that reduced public sector support...and “market censorship” imposed by corporate consolidation which reduces the diversity of funding sources, artistic autonomy, and space available for creative production. (41)

While I think it is important for us to recognize the employment opportunities that exist and incomes that are available in the creative industries, it is even more important for us to realize that those industries are most sustainably based on cultural policies that have had principals of inclusion at their base (40)...the aim is for a more nuanced path to development, with the possibility of blending economic development with the deeply felt need for liberation and self-identification. (99)

We would rather suggest that the Knowledge Society is one in which institutions and organizations enable people and information to develop without limits and open opportunities for all kinds of knowledge to be mass-produced and mass-utilized throughout the whole society. At its best, the Knowledge Society involves all members of the community in knowledge creation and utilization; it supports the goal of high quality and safety of life.(141)

[Citizens need to be provided]...validation of diversity, validation of creativity, acceptance and high social status bestowed on people that devote themselves to creative thinking, even if this means politicizing issues, all happen in the context of the civil society.... Educational decision makers... would have to live up to the challenge of firming up its intellectual independence and finding the courage of former times of enlightenment. This might require an institutional change that would alter ways in which academic research is funded or rewarded now. (145)

The U.N. Department of Economic and Social Affairs expressed similar reservations in 2005 stating:

We have indicated that from the point of view of quality and safety of life, just producing one kind of knowledge (e.g. the knowledge “to do”) at high speed and in high volume may not be enough. (141)

Globalization has had a profound impact on local cultures and their creative practices. Ecological degradation, global tourism, and having a “subordinate position” within the global economic system have led to declining cultural self-determination across the globe among local cultures (Juárez 2002, 113). The plight of the indigenous Aka pygmies of the Central African Republic is but one of many examples that illustrate the impact of neoliberal globalization initiatives. The chants of the Aka, a complex vocal counterpoint with percussion accompaniment and stringed instruments, are endangered as a traditional practice, as is the tribe itself, as a result of the

“disappearance of wildlife caused by deforestation and the exploitation associated with tourism” (Westra 2011, 164). Because of the destruction of their food source and other means to meet basic needs, they must forego their traditional practices of living off the land and music-making, and are forced to adopt the neoliberal market practices of a constantly encroaching dominant hegemony. Concerning the loss of cultural resources, a 1995 UNESCO report entitled *Our Creative Diversity: Report of the world commission on culture and development* appears on point:

Our generation has inherited a wealth of tangible and intangible cultural resources that embody the collective memory of communities across the world and buttress their sense of identity in times of uncertainty. Held in trust for humankind, these resources are essentially non-renewable. (176)

Social space and time are important concepts here. The Aka have evolved over millennia as part of a stable ecosystem; that is, social space and time have been shaped to meet the needs of a culture inseparable from the ecosystem on which it relies. In general, time and space are “deeply cultural...they are the result of relations and effects over time” (Slack and Wise, 180), and they vary according to the changing needs of a culture. Lived time and space, experienced, vary across cultures and from individual to individual.

Three areas in which cultures conceive of social time and space are practices, representations, and representational experience. According to MacGregor and Wise (1997), social spaces are “created through multiple interactions of humans over time...[and are] multiple and permeable” (xiii). The “*representations of space*” are the concepts of culturally determined space that are manifest as “something to be lived in” (e.g., places to work, live, play, or learn), shaped to facilitate the needs and “practices” of a group which are “unique to the architecture” of a given

space. Social practices and social space “intersect” and are “experienced” as “lived space” (Slack and Wise, 182). They write:

Representational space—space as it is lived—is the direct, lived bodily experience of space, which includes how we live in space, move through space, and experience space, including the semiotics of space, the meanings we make of the signs and images in the space. It is our awareness of space as we variously accept, appropriate, and change space as a lived experience in the intersection of spatial practices and representations of space. It is what space “feels” like. (182)

Time can be “conceived as the space in which things happen”; however, Slack and Wise suggest that a more useful conception is in terms of how “everyday life has been temporalized” (183).

Explaining “that the practices, representations, and experiences of time within which we live are always cultural: temporalities are productions of relations and effects in space” (183)

The forces that affected the ecosystem the Aka depend on, reveal a time (and space) bias that exuded undue harm. This bias is rooted in different conceptions or representations of time being incongruent. Sharma (2014) explains that time as lived experience is

always political, produced at the intersection of a range of social differences and institutions, and of which the clock is only one chronometer....discourses about time maintain lines of temporal normalization that elevate certain practices and relationships to time while devaluing others. (15)

The creative wellbeing of the Aka is dependent in part on oral tradition, which according to Slack and Wise “empowers” those who have an internal “memory” acquired over time.

They “empower group cohesion” and have a socially shaped time for practices in which group members participate face to face, existing in “proximity to one another” (188).

When social time and space are threatened so may culture, habitat, ecosystem, and wellbeing be threatened. Sharma writes:

there is a shared sentiment [among critical theorists]: new technologies and faster moving capital herald grave political and social consequences....[T]he yielding of space to time

not only dissolves the grounding of politics but also gives rise to a way of being in time that is adverse to the political sphere. Moreover, rather than facilitating an egalitarian global village, the yielding of space to time divides the citizenry into a temporal binary. There are two temporal poles of chronopolitical life: fast classes and slow classes (Virilio), tourists and vagabonds (Bauman), inhabitants of chronotopia or chonodystopia (Armitage and Roberts), and the time rich and the time poor (Jeremy Rifkin). These two temporal classes are imagined to be two distant ships that never pass, unknown to each other. (6)

Slack and Wise describe these spatial and temporal poles as the outcome of time biases that exert their will in the form of an assemblage of space, time, and technology, a “temporalized and specialized territory” in which these elements are interdependent and interrelated (180). They explain how the temporalizing of social space positions the “clock [as] prescribing a highly disciplined body in the service of the ineffable” (184). Globalization, which thrives on speed, efficiency, and the wide spread use of technology, empowers a chronic in the “digital global business environment” (190). Insatiable market needs drive society, and the speed at which one is expected to work while making him- or herself chronically available, (i.e., no down time; connected “24/7”), has altered the reflexive process. Crary (2013) asserts, “the modeling of one’s personal and social identity has been reorganized to conform to the uninterrupted operation of markets, information, networks, or other systems” (9). Similarly, Humann (2009) writes:

Nearly ubiquitous technologies such as the telephone, home computers with World Wide Web access, pagers, mobile phones, GPS and other wireless devices have rendered private space and personal time accessible to the demands of business and, increasingly, the interests of government. To put it simply, it is no longer true, as Marx once claimed, that the worker “is at home when he is not working, and when he is working he is not at home. (39)

According to research by Slack and Wise, the neoliberal clock “disempowers deliberate thought and practice, [and] those with limited access to the technologies of speed” (190). It also provides insufficient time for rest, periods of homeostasis, and an alpha wave brain wave state (Vorhauser-Smith, 9), which are vital to physical health and individual and group wellbeing, and

in which rests space for cognitive and social growth and progress. Specific examples of this growth and progress are memory consolidation; mindfulness (Brown and Ryan 2003, 822); creative thought (Carson 2010, 45); improvisation and flow (Belot 2015) or zone; reflection, assessment, and planning; and other aspects integral to healthy self-regulation (Dietrich 2013) (Damasio 2010, 30). This assemblage of technology, time and space functions as a hegemony, “coordinating the world” in the fast, continuous, void-of-essential-downtime service of neoliberal ideology. Cultures that rely on face-to-face oral traditions, such as the arts, suffer because they require time and space to be experienced much differently than is prescribed by the neoliberal globalization agenda.

In postcolonial Mali, music has been the subject of a complex ongoing upheaval that has placed it at times in the control of the government, of the private sector, and of religious extremism. Ryan Skinner’s research in this area reveals that creative wellbeing progress under these systems is very difficult (2012). Following independence from French imperialism, Malian musicians were subject to “state controlled cultural production, distribution, and exploitation” (66). Their work was “considered property of the state...[and as] work for the nation...and [was] for the most part, propagandistic in terms of content” (66). It is important to understand that praise singers in Africa have long served as “vital voices” and oral transmitters of the continent's tradition. As such, they have been “used and abused by politicians and tribal leaders who understood their power” (Birell 2013) as vehicles for diffusing ideologies. Under state ideological control, musicians were treated poorly, creative freedom was nulled and they were financially exploited, often not being paid, and denied access to their own works (no copyright). During the 1980s, structural adjustments applied to the economy freed both public servants and public resources.

According to Skinner, “through gross mismanagement” and neoliberal emphasis on “privatization,” the conditions were set for an “unregulated free market” in which a proliferation of “unauthorized broadcasts” by radio stations and illegal manufacturing of CDs and merchandise by “pirates” continually undermined the attempts of musicians to make a living through their copyrighted material (75). Critics such as MacGregor Wise add that the globalization process that brought privatization to Mali also brought the global market desire for World Music, or what he calls “aural tourism...of authentic, tribal, or primitive music” (79). He explains this as an arm of Western imperialism, in that the “generosity of Western musicians” is needed to “save” local cultural music from fossilization.

In 2012, the Malian government was overthrown yet again, this time by Islamic extremist militias, the mujahedeen. Music was banned in most of Mali following its collapse that year and accordingly, they “have not just banned it: they [have] declared war on musicians, destroying their equipment and threatening to slice off their fingers” (2013). A resident of Mali expressing his frustration in a phone conversation with Thomas Fessy of the BBC, stated, “Music is so much part of our culture...It's everywhere here; I miss listening to it over tea with my friends on the weekend. I miss attending wedding ceremonies and baptisms” (Fessy 2012). Mali serves as an example of the possible consequences to agency, sustenance and creativity brought about by dominant ideologies as they permeate creative domains.

The Aka and Malian examples reveal that contemporary policy makers tend to perceive culture as a “resource or a good” (Holder 2006, 78). This perception can lead to an undermining of freedoms and rights essential for subjective wellbeing. Holder writes, “an assault on a group’s capacity to use, access, produce, or maintain the materials [that facilitate cultural] participation is

an assault on their capacity to pursue the activity at all, and as such is an assault on each of them as a human being” (91).

In sum, creative domains, like all cultures, are permeable, and this inherently allows for influence by external constraints that may either facilitate or undermine creative wellbeing within the domain. Therefore, the interrelationship between external constraints and creative wellbeing must be accounted for in any model of subjective creative wellbeing.

5.4 ONGOING TRANSMISSION OF HERITAGE AND TRADITION

According to Ravelli (2011) cultural tradition can be understood as a “complex collection of values, beliefs, behaviours, and material objects shared by a group and passed from one generation to the next” (38). This understanding hinges on the earlier notion that culture must be conceived as an activity, providing the necessary fluid and dynamic medium for the transmission of tradition and domain knowledge that takes place across real time and space.

Tradition is a reflection of heritage. Graves (2005) believes heritage is vital for the “continuity of tradition...the glue connecting the present with the past” while “providing the cues needed to make sense of the disparate data of the present” (7-10). This again emphasizes the dynamism and permeability of culture. Tradition is fluid, susceptible to, and used towards ongoing and changing needs of people. It provides culture with the medium from which it can be seen as an evolutionary system, “a trail of accumulated change” (Dietrich 2013). Maintenance and transmission of tradition provides “a dialogic medium for promoting discussions about social justice and cultural creativity in the present” (Silberman 2012, 252). Tradition, then, can be seen

as a facilitator of cultural self-actualization that is irreplaceable and must be protected as stated in the following UNEXCO document:

Folklore (or traditional and popular culture) is the totality of tradition-based creations of a cultural community, expressed by a group or individuals and recognized as reflecting the expectations of a community in so far as they reflect its cultural and social identity; its standards and values are transmitted orally, by imitation or by other means. Its forms are, among others, language, literature, music, dance, games, mythology, rituals, customs, handicrafts, architecture and other arts. (UNESCO 2001, 1)

Tradition is the part of culture that contributes to

1. sense of belonging, connectedness and responsibility to others. “Others” include “family, neighborhood, ethnicity, nationality and the many linkages that provide securing knowledge that we come from a specific place and are not alone” (Ivey 2009, 27). For example, a 2005 report by the Canadian Commission to UNESCO listed reasons for teaching the arts in terms of social aspects. Arts education “can help young people and adults learn about our collective histories...[and] builds community and social cohesion and conserves the arts and cultures of diverse groups in society” (6). The report also suggests, in part, that arts education should “include knowledge learned from cultures in which tradition, preservation and participation in the arts are emphasized” (17).

The notion of respect and understanding for the arts and arts education can be better appreciated when we consider the traditional arts of Canada's Aboriginal and immigrant societies. While traditional arts are evolving, and transformations in materials and styles are taking place, the role of the arts in traditional societies is deeply rooted in social practice. They involve not only community members like the dancer, the storyteller, the drummer and the crafts artists, but also the use and preparation of traditional materials. It would be instructive to understand more profoundly the ways in which this integration of creative expression and social life is established and maintained. (14)

2. well-balanced sense of time orientation, in which not only the present, but the past and the continuity of both the past and present with the future, is important (Ivey, 27).

Philosopher Henri Bergson explains this concept as the “theory of experience”: the idea of *duration*; an organic whole formed by the past and the present (Parker 2010, 314).

Parker Explains:

For Bergson, duration is our ultimate reality in which consciousness gathers from the past that is receding while retaining that information on the basis that it has some contributory worth to the present. In other words, Bergson sees duration as a mode in which the past is somehow preserved in our conception of a present. Furthermore, on the basis of this construction of reality, Bergson argues that it would be at this very moment, this coming together of past and present life in an individual whole, that one has most possession of one’s self. (314)

3. link to history. Through access to creative objects and ideas, and participation in creative process inspired by objects and ideas, people connect with their personal and collective past. As stated in the 2005 Canadian Commission to UNESCO report, one of the extrinsic rationales for arts education in Canada is that it “provides a cultural background to understand the past, and thus is of great cultural significance for children and creates a sense of belonging for them” (5). The Commission’s 2010 report reemphasized this, stating there is a need in arts education for the “creation of links to tradition, history, society, and cultural diversity” (5).
4. agency and individuality. Along with a sense of connectedness and collaboration with others, individuality is the other “half of [an] expressive life...a realm of individual expression where we can be autonomous, personally accomplished and cosmopolitan...[and] at times, even challenge the conventions of community or family heritage” (Ivey, 27). According to a study on the impact of culture on creativity by European Commission Director-General for Education and Culture Affairs (2009), “The nature of culture-based creativity is closely linked to the nature of artistic contribution as

expressed in art or cultural productions” (3). “Culture-based creativity is linked to the ability of people, notably artists, to think imaginatively or metaphorically, to challenge the conventional, and to call on the symbolic and affective to communicate. Culture-based creativity has the capacity to break conventions, the usual way of thinking, to allow the development of a new vision, an idea or a product” (3). The 2010 UNESCO report, similarly, suggests educators should “allow alternative art forms to flourish” (18).

The interrelationship between culture and creativity is clear, significant and necessary. Culture-based creativity is an ongoing process (activity) that provides for individual and group cultural wellbeing and transmission of heritage within an internally contested creative domain and with a well-balanced time orientation. In contrast, commercialized creativity discussed in the previous section (Ideology and creative domains) is viewed as a product-oriented skill that depends on external adjudication of worth, a disembedding from cultural scripts, and an anxiety-fueled present-time orientation.

5.5 KNOWLEDGE ACQUIRED BY LEARNING

Knowledge was discussed in Chapter 3 as a cognitive component of creativity, and the building of a knowledge base was shown to be crucial to the development of referents and domain expertise. If creative domains are social constructs analogous to cultures, it is also important to explore conceptions of knowledge within cultural frameworks.

Culture as a social construct situates “knowledge [as] acquired by learning rather than intuition” (Vallance 2006, 98). This conception of knowledge acquisition is neither “objective” nor “neutral” (Chang 2014, 79), and it suggests that reflexivity, the process of self-construction, is a

multi-leveled concept. In this case, as Alvesson states, *methodological reflexivity* can be used as an approach to understanding the “knowledge making enterprise, including a consideration of the subjective, institutional, social, and political processes whereby research is conducted and knowledge is produced” (2007). Therefore, within such a framework, knowledge is a subjective social product, “accepted for the time being by members of the discourse community but subject to revision or change” (Chang, 79).

Socio-cultural knowledge is the shared beliefs of a group acquired over time via language, social practices, environment, education, media, etc. (van Dijk 2005, 13). This knowledge or set of beliefs is stored as *social memory* in our collective working memory system (WMS) (13). Socio-cultural knowledge exists within a *thinking society*. A thinking society is a dynamic, evolving social domain that facilitates and fosters shared thoughts and the communication of thoughts from many different social groups. According to Tileagă, the socio-cultural knowledge of a *thinking society* that produces “values and meanings” plays out in the management of, and action within, social contexts (99).

5.5.1 Reified and Consensual Knowledge

Reified knowledge commonly refers to validated, objective, abstract, measurable, fact-based knowledge, such as that found in science. Alternatively, *consensual* knowledge refers to actively evolving social knowledge underpinned by consensual trust and or faith generated through social cultural interaction against the backdrop of society (Tileagă, 99). The notions of reified and consensual knowledge suggest a range of knowledge phenomena from “real, concrete, abstract, fictitious, historical, to future events, etc.” (van Dijk, 13).

According to Glaser, “society exists both as [an] objective and subjective reality. The former is brought about through the interaction of people in the social world, with this social world in turn influencing people in routinization and habitualization” (40-1). *Habitualization* produces objectified knowledge, providing referents so that routine social practices do not have to be reinvented each time they are repeated. In describing this essential aspect of social knowledge, Schank and Abelson (1995) claim that “knowledge is functional; it is structured not to satisfy an elegant logic, but to facilitate daily use” (2). Further, it is also fluid, acquired over time through ongoing experience and subject to internal and external influence. The authors assert knowledge is used to “ask questions, make plans and inform them, comprehend what others are saying, inform others about what events have taken place, [and] give advice to people” (2-3). Thus, knowledge can be seen as relative, the criterion that constitutes it differs based on the needs of a given domain (arts, business, culture, society, dominant ideology, etc.). Knowledge is also relative to needs within a social scope (“personal, interpersonal, social (group), cultural”), etc. (van Dijk, 13).

5.5.2 Common Ground or Tacit Knowledge

As discussed, subjective and objectified knowledge within a social construct includes, and is largely analogous to, the idea of *common ground knowledge*, which refers to the shared beliefs within a given social construct that form the “everyday language” and need not be expressed (except to “children” or “immigrants”) and that allow us to “function in society” (in other words, they are referents, schemas, or cultural norms) (van Dijk, 13). Hedlund, Onakis and Sternberg (2002), describe an aspect of common ground knowledge with the term *tacit knowledge*, meaning “what one needs to know to get along in daily life that typically is not explicitly taught

or even verbalized” (11). This type of knowledge illustrates an implicit motivation to recognize and internalize meaningful “patterns of events in [individual’s] experiences as “schemas, most of which are latent—to make sense of their experiences. These schemata are continually tested in practice and updated as environmental conditions change” (11). It is common ground knowledge that provides the shared framework for entire societies to function. According to van Dijk, “Without it, people of different groups and with different ideologies would be unable to cooperate or to communicate” (17). In addition, referring back to the notion that culture is fluid and changes over time, common ground knowledge must also be susceptible to these forces. For example, the belief that global warming is an empirically proven planetary change was accepted at first by only a few scholars but over time has become accepted as common ground knowledge by most scientists around the globe.

As explained in Chapter 3, an internal knowledge base can be applied to creative domains, such as musical traditions. Such a knowledge base involves common ground knowledge. How do musicians find avenues for creative thought, and how do others know that what they are doing is, for example, music of a certain genre or music that is creative? The intelligibility of a musical sound system (composer, performer and listener) involves constraints provided by musical (cultural) norms, in other words, common ground knowledge. Schemas provide the constraints against which creativity is possible and recognized. If creators operate randomly, without the constraints of any schema whatsoever (including “anti-schemas,” which by definition, assume the framework against which to rebel), no one, not even the creators, will recognize creativity in their products because novelty can only be recognized in relationship to a shared set of norms. Leonard Meyer (1989) writes that without cultural constraints, “envisaging is enervated and

choice crippled by confinement to the immediate” (349). Referents (schemas) also provide material for innovation, variation, and inspiration towards something entirely new because internalization of these referents in a knowledge base allows for the processing and combination of these ideas in the subconscious (Pressing 1988).

5.5.3 Discourse and Agency

How is such individual, cultural and societal knowledge expressed? Language (speech, text, paralinguistic gesture) has been understood as the dominant vehicle for both objective and social knowledge transmission and acquisition. Language is used to acquire and transmit knowledge, confer meaning, form memories, persuade, and communicate effectively within and across cultural groups, including society at large. Family, social groups, media, politics, institutionalized education, and the marketplace all participate in knowledge transmission via language. Language used to form and manage “social rules, practices and forms of knowledge that govern what is knowable, sayable and doable in any given context” is termed *discourse* (M. Adams, 75). Foucault studied how dominant discourse evolves and is used for “regimes of truth” used to guide “personal conduct and self-understanding” in relation to the world. He states that we are “compelled” to take up dominant discourse in order to situate ourselves within a social framework and its practices towards a sense of “freedom” and “agency.” Interestingly, Adams points out a paradox here: one’s fundamental dependency on discourse imposed on him or her is what facilitates one’s sense of freedom and agency (76). Therefore, in a real way, as Foucault suggests, the self, shaped through discourse, is “an imposition upon an already authentic body” (77).

Understanding the relationship between discourse and knowledge allows us to understand the potential impact of contradictions between discourse existing within a creative domain and that existing outside of it in dominant societal ideologies. Contradictions between discourses may result in “adjudication and reification...through a majority’s eyes” (Eisenberg, 41-2). Agents of dominant ideological rhetorics, such as those found in many democratic capitalist governments, rely on discourse as a form of *social engineering*. It is used to “exploit cognitive biases” in individuals and groups, thereby “intentionally manipulating behaviour using specially crafted communication techniques” (Watson, Mason and Ackroyd 2014, 2). However, as Brzeziński (1989) states:

Utopian social engineering is fundamentally in conflict with the complexity of the human condition, and social creativity blossoms when political power is restrained. That basic lesson makes it all the more likely that democracy—and not communism—will dominate the 20th century. (258)

The Maasai people of Kenya, studied by E.M. Bruner (2001), illustrate this clash. The dominant social ideology of globalization had a significant impact on local cultures’ discourse around creative practices. Bruner observed that the Maasai were urged to commodify their cultural practices as “tourist performances,” to become “entrepreneurial” in order to preserve their traditions in the face of global change. This influenced the discourse about and expression of local cultural practices. Performances for foreign tourists portrayed the Maasai as “unchanging”... fixing Maasai people in a frozen past, representing them as primitive, denying their humanity, and glorifying the British colonialism that enslaved them while “cater[ing] to the darkest desires of the tourist imagination” (884). Here, Bruner worries that the “line separating tourist performance and ethnic ritual has already become blurred” (903). He poses the poignant question, “how well will the Maasai continue to compartmentalize themselves and separate

performance from life?” (903). Discourse is not simply a resource for management of action; rather, it is something to which we respond when we “negotiate with others in an effort to express ourselves” (M. Adams, 98). When discourses clash, efforts to express ourselves and our cultures are put under stress.

At the same time, contradictions between discourses may also result in changes that broaden the idea of facilitated, human-centered agency, as in the case of the Algonquin women’s drum circle cited earlier. Aboriginal drumming practice had been formally documented by Europeans and transmitted as a male practice in the “European male-focused approach to historical documentation” (Goudreau, et al. 2008, 73) of the day. In that context, a context that is acknowledged to be one of assimilation and of cultural and linguistic oppression, European discourse became a dominant voice regarding aboriginal traditions and shaped subsequent understandings of cultural practices, even within aboriginal communities. There is some evidence that female participation had previously existed in the tradition; however, European discourse created “static, reified, ahistorical representations” of the tradition and constrained its internal discourse and evolution. Later, however, feminist ideology permeated the culture and challenged the accepted discourse concerning this practice. The women’s drum circle can be said to have functioned to meet the needs of an ascending voice, a hidden voice, of women in the culture. It added a dimension to the discourse that was not found in the way it functions for men (Hoefnagles 2012). In sum, the clash between cultural and ideological discourses resulted first in reification, but later in the internal contestation of the cultural practice by the women situated in it. This process added to its discourse, contributed to making the tradition a living thing—an activity—again, and contributed to cultural members’ sense of self-identity and agency.

The way in which art “communicates” new ideas in relation to past knowledge is quite different than spoken or written language or discourse. Of course, language facilitates the most direct way of communication possible through “unambiguous symbols. This provides for as little interference as possible from the thing (the signal) which carries the message” (Reimer 1970, 47). The nature of media used in the Arts, on the other hand, interferes with direct communication by including the expressive nature of such media in the process. Additionally, Arts participation is also a reciprocal process that captures both the ideas and emotions the creator brought to the process and what was revealed to him or her during that process (52). Likewise, it reveals ideas and emotions the perceiver of the artwork brought to the experience and what was revealed to him or her. It allows the public to participate directly in the creative process. In this way, the creative process naturally reflects both the transmission of knowledge and the fluid, ever-changing nature of tradition found within a democratic, thinking society’s common ground knowledge.

5.5.4 Thinking society

Within *thinking societies*, memory is, according to Tileagă, a “relational process at the intersection of individual and social frameworks” (106). This suggests memory should be conceived as “distributed beyond the head...mediated by relationships in the environment...located within mental and cultural material spaces” (105). This process is understood as either *collective memory* or *social-memory* and is “social in origin,” shaped by a thinking society [and] the “faculty of individual minds” (Misztal, 1321). These descriptions of the terms thinking society, collective memory, or social memory serve to illuminate memory as

both a dynamic and ongoing process, and can be added to the cognitive conceptions of knowledge and memory discussed in Chapters 3 (Creativity) and 4 (Self-system).

5.5.4.1 Social Memory

According to van Dijk (2005), social memories are traditions, “social representations shared by a group and function[ing] as a framework that defines the overall coherence of their beliefs” (14).

Vinitzky-Seroussi and Teeger (2010) further define social representation as “narration and representation” of the past (1103). Similarly, French, (1995) describes the concept *social memory* in terms of asking how and why “diverse people come to think of themselves as members of a group with a shared past” (9). Even more specifically, it focuses on the “opinions [and] attitudes” that shape group “beliefs” (van Dijk, 14). Values, which mediate action and evaluation and serve to define ideas of “good,” “bad,” “prohibition,” “permission,” and overarching “aims,” are also a contributing factor in social memory (15). It has been suggested that social memory can, “modify and influence perceptions, values, and perspectives...[It is shared, which helps] maintain group solidarity and cohesion...[It is cumulative]...each generation refines and modifies their beliefs to meet their changing needs...[I]t is transmitted in order to survive...” (Ravelli, Webber and Patterson 2011, 40).

Tileagă describes the mechanics of the social memory system as an “active construction and reconstruction of the past from the standpoint of the present” (111). It has been suggested this process involves acquisition (construction and consolidation), and recall (reconstruction) and functions in part to maintain a coherent self-identity (Ramachandran 2011; Conway 2005). As such, memory can be seen as the bedrock for our identity. “It is through constructing, negotiating or resisting identities that individuals are able to acquire, make sense of and recall their

memories” (Tileagă, 112). Memory provides a shared domain in society by which individuals are “agents” [of social memory]...the nature of what is remembered is profoundly shaped by what has been shared with others so that what is remembered is always a memory of intersubjective past of past time lived in relation to other people” (Misztal, 1321).

5.5.4.2 Social Memory and Wellbeing

Social memory that is “open ended, non-fixed, non-politicized...is good for cooperative relationships” (Misztal, 1331). According to Misztal, it can “enhance or reduce the democratic potential, depending on the extent to which the community adopts a critical and open approach to its past...[It is best facilitated] in a safe, open, critical, and reflective environment” (1331-2). Similarly, Cantril (1942) wrote, “The citizen who is given sufficient facts and motivated to pay attention to those facts...will reach a decision based on his [or her] self-interest as a member of a democratic community” (151).

Misztal suggests social memory “enhances creativity... [and can] expand imaginative thinking and creative potentials [providing] the magic of emotions, affectivities, and meaningful identities” (1329). Free flowing ideas and narratives in society contribute to creative wellbeing because they break up “habitual ways of thinking and closure...” (1328), promoting openness, critical thinking, and agency.

5.5.4.3 Social Memory and Values

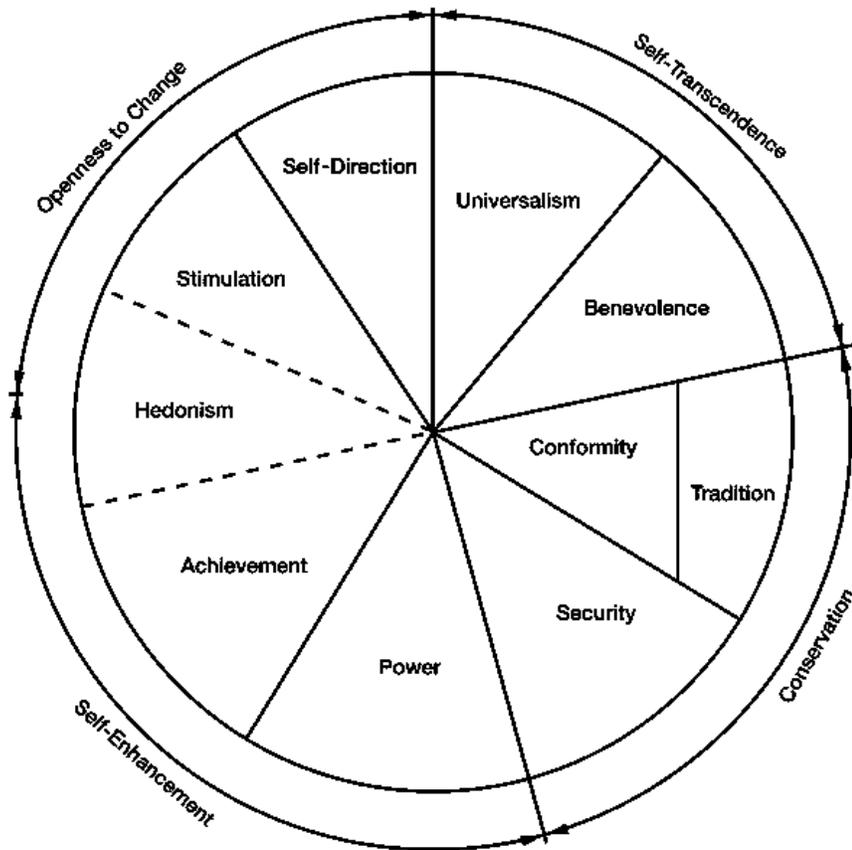
Values are a dimension of social memory that is transmitted as part of tradition over time and that contributes to self-identity, solidarity, and cohesion; however, values are subject to the changing needs of a culture. According to Tileagă, “values” act as motivators for “guiding principles in people’s lives” (26). They provide mediators for actions connected to ideas such as

good and bad, permission and prohibition, and aims. As such, values can influence and modify judgment and self-management, affecting action within social situations. Values are reciprocal in relationship to “self-concept or personality [and are] anchored between the relationship between the desired and the desirable...[They are closely related to] attitudes and behaviours” (26). Studies have shown that an individual’s values directly link identity and aspects of wellbeing to the wider socio-political environment (26-31).

Schwartz (2012) writes there are “tradeoffs among relevant, competing values, attitudes, and behaviors” (4), which can be illustrated using his Value Theory. He writes, “Values are one important, especially central component of our self and personality, distinct from attitudes, beliefs, norms, and traits. Values are critical motivators of behaviors and attitudes” (17). They “refer to desirable goals that motivate action...[are] linked to affect...and serve as standards... that guide the selection or evaluation of actions, policies, people, and events” (4). Schwartz suggests values can be reduced to two broad, motivational, goal-oriented “domains”: motivations guided by respect for tradition, concern for personal and natural security, and propensity for conformity; and motivations to seek and get social rewards, control and prestige as opposed to social justice and fairness” (Schwartz in Tileagă, 27). Schwartz constructed a “model of theoretical relations among ten motivational types of value” based on patterns of compatibility and conflict between

values (Schwartz, 9). For example, in Figure 4 below, Stimulation can be associated either with self-direction, and hence lean towards social justice and respect for tradition, or it can be associated with hedonism and lean towards control, prestige, and social rewards. In light of this information, Tileagă asserts people's "values are critical determinants of political choice" (28).

Figure 4. Theoretical Model of Relations among Ten Motivational Types of Value (Schwartz 2012, 9)



Schwartz concludes this specific research with this remark:

People everywhere experience conflict between pursuing openness to change values or conservation values. They also experience conflict between pursuing self-transcendence or self-enhancement values. Conflicts between specific values (e.g., power vs. universalism, tradition vs. hedonism) are also near-universal. I described several dynamic processes that may account for the observed circular structure. These processes may point the way toward a unifying theory of human motivation. (17)

This may illuminate conflicts between individual values, cultural values and ideological values.

For example, a World and European Values Survey, conducted by a global network of social scientists of over sixty countries (including Islamic and African societies), reveals there has been a shift from “survivalist attitudes” related to “materialist and physiological needs and motives” to “self-expression or emancipative values...(freedom, tolerance of diversity, and participation)” (Inglehart and Welzel 2005, 30). Other research shows a shift towards “post materialist values,” including “esteem of human freedom, esteem of political self-expression, esteem of non-conformity, esteem of other people, and high life satisfaction” (Tileagă, 30). These values are believed to augment public assertiveness and defiance of hegemonic authority in forms such as protests, and holding “elites accountable to the needs of people” (Inglehart and Welzel, 30), i.e. *critical citizenship*.

5.5.4.4 Social Forgetting

Memory is a process that also involves forgetting. According to Vinitzky-Seroussi and Teeger (2010), social forgetting is a collective “silencing or muting of the past” (1103). This introduces the idea that social forgetting can be functional, and that it may function to very different ends. For example, critical agency through social forgetting can aid in loosening the ties of nostalgia that may undermine human-centered progress. Therefore, social memory is not consistent with clinging to all past events in an ahistorical static way. As Misztal suggests, “healthy memory

welcomes collective memory from narrators whose credibility always can be questioned, balanced with critical, scientific, and objective distance” (1327). This protects from “nostalgia which tends to distort the past by idealizing it” or from undermining intergroup solidarity via “the collective narcissism of minor differences” that can lead to “hostilities” (Blok 1998, 33).

Vinitzky-Seroussi and Teeger pose the question that naturally follows, “How do groups that wish to remember the past do so while minimizing conflict with other groups that do not wish to recollect...” (1105). Social forgetting, as with remembering, is reflective of, and contributory to, the social narrative of a culture. Further “exclusions are far from benign...[remembering one thing may be] implicitly predicated on the ability to keep silent on others” (1107). Vinitzky-Seroussi and Teeger write, “The narration of certain memories and the silencing of others can oftentimes be conceptualized as the attempt of those in power to set the limits on what is speakable or unspeakable about the past” (1107).

The potential hazard of such social forgetting, described by Vinitzky-Seroussi and Teeger, is that “Covert silence in the domain of memory may lead to social amnesia as more and more of the narrative gets lost in the attempt to appease too many audiences” (1118). For example, in Joanna Eede’s description of the “conceit...that the western society is the pinnacle of human aspiration and that all other cultures are striving to reach it” (2011), emphasis is put on the fact that indigenous cultures offer valid alternative ways of existence that are arguably more sustainable and facilitate wellbeing to greater effect. Unfortunately, social forgetting, driven by dominant Western ideologies over time, has resulted in a social conscience unaware that there are alternative ways to live.

Silencing can also result from an “intra-personal process of repression” (Vinitzky-Seroussi and Teeger, 1108). For example, Black Americans moving from the rural south to urban centers of the north during the Great Migration would often distance themselves from their traditional cultural practices in an attempt to exclude stigmas that may have impeded their attempt to transition from a rural to urban setting. This transition demanded they acculturate in order to “succeed” in a white dominated environment. This exclusion or silencing of elements from the past was not overt, meaning there was no literal silence. Rather, Vinitzky-Seroussi and Teeger write, “covert silences in the domains of memory and forgetting are used in different social contexts where groups are being called upon to deal with their difficult and shameful pasts” (1118). This covert forgetting found itself manifest in the arts as well. Some black musicians, during the period described above, distanced themselves from the blues which they thought of as a “primitive” art form reminiscent of an embarrassing or painful past. For example, according to Friedwald (2012), black American musician W. C. Handy, who expressed he was a trained orchestral composer, made it “very clear that he was not actually one of the poor blacks who grew up around traditional blues music. He was a blues mediator, not a blues man...maybe distancing himself from the latter to be sure of his success as mediator” (46).

Decades later, during the 1960s Civil Rights Movement, African Americans, keen on reclaiming their past, began proudly reclaiming their social memory, including reclaiming the music and messages found in the blues. Dr. Martin Luther King Jr. expressed the significance of the blues to their socio-cultural identity in the foreword for a 1964 Berlin Jazz Festival program:

The blues tell the story of life's difficulties, and if you think for a moment, you realize that they take the hardest realities of life and put them into music, only to come out with some new hope or sense of triumph...It is no wonder that so much of the search for identity among American Negroes was championed by Jazz musicians. Long before the modern essayists and scholars wrote of racial identity as a problem for a multiracial world, musicians were returning to their roots to affirm that which was stirring within their souls...Much of the power of our Freedom Movement in the United States has come from the music...And now, Jazz is exported to the world. For in a particular struggle of the Negro in America, there is something akin to the universal struggle of modern man. Everybody has the Blues. Everybody longs for meaning. (Jazz Times 2016)

5.5.4.5 Social Forgetting and Hegemony

Hegemony, a maintained and sustained dominant ideology, involves a covert forgetting of the past. Hegemony benefits from a “closed or fixed memory...which can hinder cooperation between groups...that may not agree with the authorized” memory (Misztal, 1332). This type of ideology, reflects a “lack of interest in the past” often associated with “authoritarianism and utopian thinking...the root of oppression and loss of memory” (1328). As a result, at its most extreme, “society will no longer find within itself the elements necessary to reconstruct, consolidate, and repair...traditions” (Halbwachs 1992, 160). Therefore, people's opinions may become a manufactured form of social control (Tileagă, 15).

In a society where the hegemonic manufacturing of opinions replaces a freethinking society and its consensual knowledge, the externally-created, opinionated self replaces the critical agent. For example, during the 1980's, Ontario Premier Mike Harris's conservative government coined the term *common sense* for the neoliberal globalization process. This slogan brilliantly, subtly, marginalizes those who may have different views on how society can best function by making their attempts at discourse appear “nonsensical” (Giroux 2011, 5). There is a long list of

consequences that fell out from this type of rhetoric, including the move in post-secondary education to replace classical education in the Arts and Humanities with applied versions based on the premise that this is a “common sense” shift based on marketplace values and needs (Bostock 1999). Freire (1970) wrote, “Sectarianism fed by fanaticism, is always castrating...it is mythicizing and irrational, turn[ing] reality into a false (and therefore unchangeable) reality...it is the obstacle to the emancipation of mankind” (20-1).

Accordingly, Feyerabend (2000) asks the rhetorical question “is it possible to create a tradition that is held together by strict rules...to the exclusion of everything else?” (496) He answers his own question, “NO...the world which we want to explore is largely unknown entity. We must therefore keep our options open and we must not restrict ourselves in advance” (496). Every question, every motivation, has many sides, all of which should be explored, as each provides meaning that may be relevant to socio-cultural homeostasis and SCWB.

Therefore, agency is critical in assessing individual and group capabilities and assessing economic, social, or political barriers to achieving freedoms. “The freedom to question and reassess” [and the] “freedom to act...[situate] critical agency [as a] great ally of development.” (Sen 2002, 274). Dominant ideologies, or hegemonies can undermine aspects of a thinking society’s consensual knowledge and social memory, “essential for autonomy...[,] self-awareness” and “access” to “potentials and limits” (Misztal, 1328).

Although not physical entities, dominant ideologies, as with all social constructs, can have a profound impact on the very real people “of which they are composed” (Rees, xii). One might assume that various culturally-constructed conceptions of creativity are different but equally

valid; however, Rees believes that although there are countless social constructs through which to shape reality, not all are “equally valid” (xiii). He suggests that social constructs should enhance individual and social...prospects for cultural survival in the face of rapid global change... [and should] not jeopardize the health and safety” (xiii). If this is an important consideration, we should ask, “At what point does the shift from subjective meaning, or use value, to objective meaning, or exchange value, of creative outcomes undermine the enhancement of human-centred individual and social full-scope capability, progress, and wellbeing, including the agency needed for cultural survival?”

5.6 CULTURE AND IDENTITY

Adams (2007) suggests that once one considers discourse and agency in connection with culture or self-identity, there should be an abandonment of “simplistic proclamations of autonomy and personal responsibility to construct an authentic self” (97). Discussions on self-identity should involve the idea that “self-realization is...embedded within realms of mutuality, trust, intimacy, and affection” (99). At the same time, identities are not only shaped by cognitive discourse and shared knowledge but by infinite implicit webs of inner experiences. Various theories of motivation (see Chapter 6), for example, show that individuals’ actions are also biological, implicit and/or emotionally driven (Posner, Russell and Peterson 2005; Juslin and Sloboda 2001, 3; Schultheiss 2008; Schultheiss and Brunstein 2010). The role of cultural knowledge and discourse in the ongoing development of self- and group-identity is significant, but it is not the whole story. Self- and group-identity within a cultural or creative domain must involve both “inner experience and inter-experience” (Adams, 98), and this complexity, similarly described in relation to aesthetic learning (See 3.1.1.4.2) needs to be taken into account in any model of creative wellbeing.

In the same way that notions of autonomy and personal responsibility are limited in their ability to explain identity, cognitively based explanations involving knowledge, ideologies, discourse, and linguistic transmission are also inadequate to explain the subjective inner experience of identity in a cultural or creative domain. Consider the earlier Arts participation examples. The aboriginal women's drum circle, the syncretism of Eastern faiths and jazz, and the non-conforming teenage escapists in the suburbs all exemplify experienced changes to self- and group identity. The "all-embracing love, pan religious ecstasy and cosmic ascension" jazz musicians found in eastern beliefs when seeking an alternative to a Western Christian model (Berendt, 25-26); the "physical, mental, and spiritual" (Hoefnagles, 204) transformative nature of the woman's drum circle; and the ability for male adolescents in the suburbs to find a balance for their self-esteem and creativity through music and dressing down suggest a more holistic approach to self-identity that is pertinent to creative wellbeing. The creative process is "its own manner of investigation and its own legitimate source of knowledge" (Noe 2015, xii). It is subjective and aesthetic; thus, it lies outside the realm of science (reified knowledge) and is a unique way of investigating the self in relation to the world or the world in relation to the self.

5.7 IMPLICATIONS

Conceiving of creative domains as socially constructed processes can be useful to inform a model of SCWB and its related aspects, processes, contexts, and outcomes. In the proposed model, the ideas associated with this chapter are included as part of the social environment system. Additionally, these ideas should serve as reference points to support culture-based

creativity initiatives and, ultimately, human-centered development that emphasizes and encompasses creative wellbeing and its interdependence with other aspects of human wellbeing.

Within creative domains, traditions and practices are maintained in the form of shared social knowledge. This common knowledge is ultimately used within creative domains, as it is with all social contexts, by individuals to identify and categorize themselves, as individuals and groups, in order to provide a “mediator” between “context and action” (Tileagă, 89). Healthy creative domains are open to formative feedback and are internally contested, providing accommodations and concessions for new ideas, even descendent ones; they are malleable in order to meet changing needs. They are permeable, benefitting greatly from intercultural dialogue and exchange of ideas. Inner and inter-dialogue, critical thought and affect, self and the environment all need to be accounted for when measuring growth.

While the permeability of creative domain boundaries allows for the openness needed for growth, a quality of mind is needed in recognizing and eliminating potential threats, biases, etc. There needs to be an active discouraging of essentialist views, which tend to freeze a dynamic complex process that undermines creative growth and wellbeing. Within any creative domain, the creative process ought to be respectfully understood as internally contested rather than passively subject to the influence of ideological and hegemonical influence. Creative domains provide insight into the way thinking societies create meaning via perceived information, in the form of norms, beliefs, values, and goals, and the way they communicate, maintain, and adjust social knowledge and memory to changing needs. They are dynamic, fluid media for the management and playing out of action.

Viewing creative domains as cultures underscores that they are their “own manner of investigation and [their] own legitimate source of knowledge” (Noe 2015, xii). When uniform progress and wellbeing are a focus, they provide space for physiological, affect, cognitive, and social dimensions of the reflexivity process. Thus, they provide space for what discourse alone cannot account for, the “inner experience and inter-experience” (Adams, 98). Incongruity between these general dimensions may impede creative wellbeing. This is consistent with research in motivation (see Chapter 6) that reveals congruency between implicit and explicit motives, orientated by intrinsic motivation, is key to psychological and even physiological wellbeing (Bender, et al. 2012, 375; Ryan 2009, 339). Creative domains ought to provide space for rationality, intuition, and ambiguity, as self-exploration and discovery benefits from a balance of all these contributors to self-identity. This is facilitated in the space provided by multi-perceptual aesthetic learning, which provides balance between self-directed exploration of inner and outer experience. Ideally, when considering wellbeing, these aspects are facilitated at both the individual and group scale.

Healthy creative domains should foster and facilitate uniform progress, partly in the form of full scope capabilities and ensuing critical agency. This involves *environmental mastery*, “the ability to choose or create environments suitable to [their] psychic conditions...as a characteristic of mental health” (Ryff, 1071). Part of environmental mastery entails having the ability to self-determine the assemblage of temporal, spatial, and technology dimensions of a creative domain so that they facilitate the type of cultural practices, representations, periods of rest and homeostasis, balanced time orientation, and experiences that reflect sustainable cultural beliefs,

values, goals, and other wellbeing needs. These aspects help explain the basic psychological need for a sense of identity individuals and groups achieve through constructing, maintaining, and managing their sense of belonging and independence. When they are healthy, creative domains are reflective of self-actualization and self-transcendence, key indicators of wellbeing: they demonstrate a sense of interconnectedness, responsibility for others, empathy, and cohesion.

The following list includes possible threats to cultural wellbeing:

- impediment of full scope capabilities and functionings;
- impediment of critical agency and its fostering and facilitation;
- inhibition of uniform progress;
- rendering domains static and inscrutable via ahistorical and essentialist representations;
- homogenization, standardization, assimilation;
- suppression of historical consciousness (Giroux 2011, 29);
- suppression of dissidence, non-conformation (freedom to question, reassess, and act);
- reification via covert social forgetting;
- limiting access and sharing of ideas (intra and intercultural dialogue, openness to new experiences)-repression;
- biasing exchange value of cultural practices;
- unbalancing of time orientation;
- depleting of, or impeding, access to environmental mastery, freedoms, provisions, and resources;
- disembedding of social actors from cultural scripts (psycho-social fragmentation);

The impact of global scale social change on local cultures, including arts domains and fields of the humanities, should be considered when wellbeing is at stake. Externalization of memory, speed and efficiency, all representative of the neoliberal time space technology assemblage are not a one size fits all solution to the idea of progress. Incongruence between these approaches and the self-determined needs, values, practices and representations of local cultures can result in

stress, anxiety, exhaustion, chronic reflexivity, leading to the impediment of self-regulation and even pathology.

Technology needs to be viewed through a lens that puts human centered critical agency and uniform progress first. Thinking societies need to reassert their consensual voices. Power and privilege ought to give way to freedom, equality, and access to provisions, resources and choices needed to meet challenges and facilitate full scope capability towards functionings. Global meanings at play in the reflexive process such as competition, individualism, self-reliance, time-space compression, and the chronic external mediation of the self, are incongruent with the type of indicators associated with intrinsic motivation, which facilitates individual and cultural growth, and wellbeing. Globalization has seen a diminished provision for aspects for affect, socio-cultural, and biological factors that play an important role in healthy reflexive process.

When the freedoms, resources, and provisions are in place to allow culture-based creative domains to flourish and meet challenges, the ensuing creative and cultural wellbeing can be seen as an antidote to the negative effects of neoliberalization. Creative domains can be used as models for teaching that ideologies should serve social priorities, not only market priorities, and that one sector of society should not be privileged over any other.

6. MOTIVATION AND CREATIVE WELLBEING

It has been asserted that the creative process is “underpinned” by motivation (Odena 2012, 201; Ryan and Deci 2000; Amabile 1996). According to the Cognitive Theory of Motivation (CTM), Cherry (2013) writes, “Motivation is defined as the [internal] process that initiates, guides, and maintains goal-oriented [purposeful] behaviours.” “These behaviours can “operate at a conscious or a subconscious level” (Psychology Dictionary 2015). Further, motivation “is what causes us to act...[and] involves biological, emotional, social, and cognitive forces that activate behaviour” (Nevid 2013, 289). Clearly, there are complex reasons for and degrees to which we are willing to employ and maintain physical or cognitive effort towards planning or completing goals such as creative endeavours.

In the context of studying the connection between creativity and wellbeing, it is important to explore motivation’s relationship to both. What is motivation, what fuels and controls it? How does this play out in creative endeavours? What aspects of motivation impact creative wellbeing? This chapter will first address the internal aspects of motivation; then the impact of environmental dimensions on the motivational process will be considered. Along the way, implications for creativity and wellbeing will be explored.

6.1 COGNITIVE ASPECTS OF MOTIVATION

Researchers have identified several cognitive factors in motivation or in the motivational process, some of which intersect. Broadly, these biological, affective and neurological factors are involved in explaining how motivation is initiated in the brain, to what degree it is conscious, what cognitive factors turn motivation into action, and what keeps people motivated over time. A review of the literature points to three main, overlapping points in the motivational process:

activation (including valence, arousal, and cognitive scope); goal setting (including intensity, explicit and implicit motivation); and persistence.

6.1.1 Activation

According to Nevid and the CTM, the spark plug of motivation is *activation*, “the decision to initiate a behaviour” (289). This suggests that activating motivation requires conscious awareness of motivational stimuli. Research suggests psycho-physiological affective states dictate whether someone will or won’t be motivated emotionally or cognitively to act towards stimuli. Affective states occur through the body’s interaction with the environment and have “two independent neurophysiological systems...termed *valence* and *arousal* systems” (Posner, Russell and Peterson 2005).

6.1.2 Valence

According to Harmon-Jones (Harmon-Jones, et al. (2011), “Valence is the positive or negative on the basis of (a) the conditions that evoked the emotion, (b) the emotion’s adaptive consequences, or (c) the emotion’s subjective feel” (1333). Similarly, Posner, Russell and Peterson (2005) describe valence as “a pleasure–displeasure continuum” (716). Research has shown that positive emotions along with high motivational intensity “directed the pursuit of primed goals” (Gable and Hart 2013, 922). Depending on valence, a person may respond to motivational stimuli with avoidance, indifference, or openness to expected results (Laricchiuta and Petrosini 2014). Valence can also refer to subjective feelings toward an expected experience that may arise based on motivational needs, goals and other outcomes. According to Schultheiss and Brunstein (2010), motives “represent capacities for specific affective experiences; they orient, select, and energize behaviour” (16). Motives can be understood as “dispositions to seek

out certain incentives for the affective changes they elicit...a person orients attention toward cues predicting the possibility of such an affective experience, selects through learning predictive cues and instrumental behaviours that will allow approach toward and attainment of the incentive, and executes such behaviours with increased vigour and energy” (16). Similarly, according to the CTM, two important aspects of motivation are “information available to the individual” and “one’s past experience that is referred to when deciding how to respond to meaningful information” (The Psychology Notes Headquarter 2016).

Researchers seem to agree, then, that the experience or anticipation of positive valence stimulates and intensifies motivation. In terms of creativity, this is significant. For example, Juslin and Sloboda (2001), assert that emotional experience is the main reason behind most listeners’ engagement with music (3). Thus natural motivational tendency has influenced “Composers [to] imbue music with emotion by knowing what the expectations are and they very deliberately control when our expectations will or won’t be met” (Levitin 2007, 109). This motivating of emotional tendencies is what Leonard Meyer (1956), is describing when equating tendencies to expectations in music: “Mental activity becomes conscious when automatic behaviour is disturbed because a tendency has been inhibited” (25). In terms of wellbeing, however, positive valence is not always linked to healthy behaviour. The mesolimbic dopamine system that is involved in the brain’s reward and pleasure system (fueling positive valence) can also be activated through unhealthy behaviour (seeking, greed, and other addictive behaviours or pathologies). The strength of this system is extraordinary: “when stimulated, this system results in positive valence, even at the risk of starvation and dehydration” (Posner, Russell and Peterson 2005).

6.1.3 Arousal

According to Posner (2005), another part of activation is the *arousal* system, the “activation of the sympathetic nervous system...[S]ensory stimuli are processed; this process includes *amygdala* in which neural representations of the emotional significance” reside, and the *prefrontal cortex* (where it is believed the conscious recognition of valence and arousal takes place, and where the decision to act or not takes place). The function of arousal is to produce “instrumental behavior” (Brem and Self 1989, 111) whereby arousal is measured subjectively by the individual and need not be acted upon unless a motivational “tipping point” is reached. Thus arousal can be seen as a continuum with indifference and inactivity at one end and anxiety and extreme activity at the other.

In relation to creativity, specifically in the arts, emotional significance is known to be a factor in people’s preference and memory for music. For example, studies that refer to the emotional triggering of motivation have shown that “as early as six months of age children begin to prefer music that is ecologically valid for their experience” (Volkova, Trehub and Schellenberg 2006, 583) By the age of five, infants have learned to recognize elements in the music of their culture; they are forming schemas with relevance to their communities. The music experience of an individual or community is defined as the “sound, real or imagined, of a human body moving in sociable storytelling (dramatic and ritualized ways)” (Trevvarthen, Gratier and Osborne 2014, 180). Many researchers see the teenage years as a “critical period” for developing musical preference. During this period, “neural transmitters in the brain ‘tag’ emotionally important music—songs that are used in connection with social bonding, self-discovery, and societal cohesion—as something to remember” (Levitin, 225-6).

Neuroscientist Seth Horowitz explains, at a “psychophysical level...we’ve evolved to expect dynamic events to be associated with sounds” (2012, 174). Horowitz suggests that jingles are not simply a way to sell you something but a “form of sonic branding...a way of linking an object with an emotion” (181). He continues, explaining how successful jingle composers understand at some level different speeds of sound, visual, and motor processing. Sound processing takes milliseconds, visual processing takes hundredths of milliseconds, and motor output is slightly slower. In order to get the listener to tap his/her fingers, dance, or move in some way to the music (it is proven that the addition of tactile and proprioceptive cues helps us remember music) it can’t be too fast for the motor output sensory system to process (183). This allows marketers to prey upon a “statistically significant portion of a population...that can be emotionally hijacked by their neural marketing” (215). Might it also allow, as Horowitz suggests:

great opportunities for music to be used as a calming agent in a stressful environment, such as a hospital waiting room or airport waiting area? Or if spatial sounds were applied to limit motion sickness on transportation? Or if sleep-inducing sounds were played for post-surgical hospital patients to help them recover faster? This is the beginning of the next stage in not only understanding sensory and auditory processing but in making it useful in the real world. (215)

Laird Addis’ 1999 work provides some possible additional insight into the link between emotions and music. He suggests that throughout individuals’ lives, music not only plays a social role but also serves to communicate information other mediums cannot, often in the form of music as isomorphic to emotion. He describes sound perceived as music as a *quasi-natural representation*, meaning music is “isomorphic with certain possible states of consciousness” (72) in that sound, like consciousness, requires “time” but not “change” (69). “Change involves some difference in the *distribution* of properties from one time to another in a way that would make qualitatively different *descriptions* apt for some point of a world from one moment to another”

(67-8). “Sounds that do not change their timbre or volume or pitch illustrate just that possibility...Indeed, it seems to be the case that, *alone among physical phenomena known to us, sounds require duration but do not require change* (68). Addis concludes:

this ontological affinity of consciousness and sound that sets them apart from everything else in this crucial regard suggests that, so to speak, consciousness may find in sound an ‘image’ of itself...in more complicated ways....This is the germ of the main thesis...that music represents possible states of consciousness. (69)

Art, and especially music, can communicate what is ineffable. Language facilitates the most direct way of communication possible through “unambiguous symbols. This provides for as little interference possible from the thing (the signal) which carries the message” (Reimer 1970, 47). The aesthetic nature of art interferes with this type of direct communication by including the expressive nature of the medium into the process. It is also a reciprocal process that captures both the ideas the creator brought to the process and what was revealed to him or her during that process (52). Likewise, it reveals ideas the perceiver of the artwork brought to the experience and what was revealed to him or her. It allows the public to participate directly in the creative process. With specific reference to music and emotion, Tagg (1982) suggests “communication of affective states and process are conceived and transmitted as ineffable sound structure to those decoding their message in the form of adequate affective and associate response” (5).

6.1.4 Cognitive Scope

Arousal has also been linked to cognitive scope. Cognitive processing scope refers to the mind’s way of organizing the internal representation of reality into manageable areas of focus that reflect motivation and goals, needs, and other anticipated outcomes. According to Ferguson, Hassin and Bargh, an individual’s goals influence the elements of a situation to which [one pays] attention...and [influence how one] process[es] information about those elements” (2008, 157).

“Certain affective states can enhance certain aspects of cognition while simultaneously impairing other aspects of cognition” (Harmon-Jones, Gable and Price 2012). Specifically, different types of motivation can broaden or narrow cognitive processing scope, which impacts the degree and focus of intensity. According to Gable and Harmon-Jones (2016), “affective states low in motivational intensity (e.g., amusement, sadness, post-goal positive affect) broaden cognitive scope, whereas affective states high in motivational intensity (e.g., desire, disgust, pre-goal positive affect) narrow cognitive scope” (2).

Harmon-Jones, Gable, and Price (2012) suggest that “pre-goal, high approach-motivated positive affective states, such as desire and enthusiasm, narrow cognitive scope, so that organisms are not distracted by peripheral details that may impede goal pursuit” (2). Motivators that fuel concentration, focus, not being easily distracted, determination, digging deeper into ideas, analyzing, evaluating, and persistence are some creative behaviours that thrive on a narrow cognitive scope and positive affect state (Limb and Braun 2008; Belot 2015; Vorhauser-Smith 2011; Hassed 2002). The terms “flow” and “in the zone” associated with creativity are examples of this state. This is because in those states, emotional arousal decreases attention “allocated to peripheral information” (Kaplan, Van Damme and Levine 2012). As emotional saliency rises, cognitive focus narrows. Similarly, the creation of memories, which involves emotional tagging of information and its consolidation into long-term storage, requires strong central information and weak or “blurred” peripheral information (2012).

In contrast, according to Gable, Threadgill, and Adams (2015), “a broadened attentional scope resulting from positive states low in approach motivation may expand cognitive breadth after goal accomplishment when a narrowed cognitive scope is no longer necessary for goal pursuit”

(4). According to Hofstadter (1979), a broad cognitive scope takes place when one “stands outside formal frameworks” in order to entertain creative new ideas and/or perspectives, which will broaden one’s knowledge base and perhaps fuel further creative outcomes (192-3).

Some creative behaviour traits such as risk taking, openness to new ideas, exploring possibilities—aspects of creative behaviour that reflect openness (Fromm, 53; Rogers, 187-95), require a broader cognitive scope and moderate affect state:

post-goal, low approach-motivated positive affective states, such as satisfaction, promote openness to new opportunities. After the goal is accomplished, a broad cognitive scope allows new goal opportunities to be identified and later pursued. Low approach-motivated negative affect, such as sadness, also broadens cognitive scope. When goals are terminally blocked and motivation lowers, broadened attention may assist in finding new solutions to the goal or finding a new goal. (Harmon-Jones, Gable and Price, 2)

In general, then, high motivational intensity narrows cognitive scope while low intensity broadens the scope. Narrow cognitive scope usually aids in building and storing memories.

However, pre-goal *incentives* that fuel a high-affect, narrow scope and result in “memory narrowing.” An experiment by Harmon-Jones, Gable and Price in 2012, for example, found that monetary incentives, associated with fuelling high affect state, narrowed cognitive scope. They reported, “We found superior memory for centrally presented words after pre-goal positive affect cues than after post-goal positive affect cues.” However, subjects exhibited “poorer memory for the context in which high reward words had been learned” (2). Therefore, according to Gable, Threadgill and Adams (in press), “positive pre-goal states enhance central memory, whereas positive post-goal states enhance peripheral memory” (4).

Context is important for creative thinking, which involves making connections between ideas in working memory and in long-term memory. Information perceived in the immediate environment will only be consolidated as long-term memory if it is associated with other

knowledge contained in long-term memory. Incentives, because of memory narrowing, prevent this association; thus they have a negative effect on creative thinking. This also has implications for creative education, where grades may motivate students to narrow focus and acquire knowledge in the short term for “regurgitation” on graded tests but may work against a long-term, connected knowledge base. This may explain in part why students can test well on isolated aspects of, for example, musical theory but do not seem to integrate this knowledge over time into their playing.

Overall, the effect of emotion on cognitive scope, and therefore on the perception and processing of information relevant to motivation, can be summed up as follows:

the narrowed cognitive scope that occurs with high motivationally intense affective states may hinder perception and processing of peripheral (or global) information that would prove useful. On the other hand, low motivationally intense affective states broaden cognitive scope, which may allow new goal opportunities to be identified and later pursued. However, the broadened scope that occurs with low motivationally intense affective states may hinder perception and processing of central (or local) information that would prove useful. Together, this body of research suggests that emotion may impair and improve cognitive processes depending on the situation in which the emotion occurs. (Harmon-Jones, Gable and Price, 4)

This has implications for the creative process in that time and effort must be balanced between states. On the one hand, positive periods of narrowed focus are essential. High positive-affect, narrow scope states are useful for developing, analyzing and storing elements in a knowledge base; for “flow state” to occur; and for persistence toward creative goals. However, it seems equally important to alternate those periods with periods of broader cognitive scope and moderate affective state so that those engaged in creativity may open their minds to new ideas, take risks, or allow peripheral information and context to be meaningful. Finally, because of memory narrowing, pre-goal incentives such as money, notoriety or grades must be viewed as

counter-productive, for they impede the connections between working memory and long-term memory that are necessary for creative thinking and for building on a knowledge base.

6.2 GOAL SETTING

Ferguson, Hassin and Bargh's 2008 research shows individuals "possess multiple goals and objectives within and across situations" (159). As part of managing this complexity, *goal setting* is used. One function of goal setting is the self-management and co-ordination of episodic memory and autobiographical memory, described by Conway as *goal prioritization*, "the main function of which is to maintain coherence (between goals), and it does so, in part, by modulating the construction of specific memories, determining their accessibility and inaccessibility, and in the encoding and consolidation of memories" (597).

The *working memory*, described by López-González and Limb (2012), or *working self* as described by Conway refers to a "*goal hierarchy*," part of the working memory system. According to Conway, the purpose of the goal hierarchy is to align "desired goal states and the current state and in so doing, regulate behaviour" (595). Working-self *goal hierarchy* also facilitates new knowledge acquisition to long-term memory, access to pre-existing knowledge, and construction of new memories. "Goal structure is in a permanent state of activation"; therefore, at any given time the "guiding and regulating [of] current cognition, affect, and behaviour" (598) can be directed by a current goal-state. Conway explains:

In these respects, the goal hierarchy of the working self operates as a set of control processes that determine encoding, accessibility of knowledge in long-term memory, and the construction of memories for attitudes, values and beliefs. All of these are abstracted knowledge structures that exist independently of specific, temporally defined incidents (episodic memories and autobiographical knowledge), but are connected to autobiographical knowledge and the episodic memory system to activate specific instances that exemplify, contextualize, and ground their underlying themes or concepts. (597)

According to goal setting theory, goal setting refers to a process by which goal complexity, time involved, and the specificity of the goal are assessed. Firstly, the shorter the time between motivated action and goal, the higher the chances of attaining the goal. Secondly, the challenges must be faced with enough resources or capabilities and must satisfy the need for self-efficacy, meaning the goal is neither too easy nor too difficult (Locke and Latham 2006). Locke and Latham (2006) explain the relationship of this cognitive process to affect: “Goals are related to affect in that goals set the primary standard for self-satisfaction with performance. High, or hard, goals are motivating because they require one to attain more in order to be satisfied than do low, or easy, goals” (265). Thirdly, goal setting focuses cognition and associated behaviour towards goal-relevant behaviour; therefore, the more specific the goals, the more efficient individuals will be in reaching them (465).

6.2.1 Intensity

Another internal aspect related to activation and goal setting is *motivational intensity*. According to Harmon-Jones and Gable (2012) motivational intensity is “the strength of urge to move toward/away from a stimulus” (4). Cherry defines it as “the concentration and vigour that goes into pursuing a goal” (Nevid). Brem and Self (1989) suggested that motivational intensity refers to the expectation that “performance behavior” will “affect...needs and outcomes” (111). In other words, intensity is not simply a 1:1 reflection of value benefit (the more valuable or beneficial the goal or outcome, the more intensity). Rather, *potentiality intensity* is the perceived probability of success being directly proportional to the perceived difficulty of the task (117). This is because humans are naturally predisposed to conserve energy; therefore, motivational

intensity is not simply a reflection of “proportional needs and/or outcomes value” but of the amount of effort needed to reach a goal, no matter how “valuable” (111). “When the difficulty of instrumental behaviour surpasses one’s capacities or outweighs the value of the potential gain (need reduction, outcome attainment, or outcome avoidance), there will be little or no mobilization of energy” (111). Therefore, intensity also depends on perceived skills (117). When individuals perceive their skills as sufficient to attain the goal/outcome, their effort increases. Alternately, when individuals perceive that their skills are insufficient to meet a given challenge, their effort diminishes.

6.2.2 Persistence

Another “operating characteristic” of motivation is “persistence over time” (Ferguson, Hassin and Bargh, 11). According to Cherry (2013), *persistence* “is the continued effort toward a goal even though obstacles may exist.” According to Cloninger, Svarkic, and Pryzbeck (1993), persistence is a distinct “dimension of personality” related to “temperament and character” and is related to “self-directedness,” “resourcefulness,” and “purposefulness” (10-11). In relation to motivation, persistence refers to “perseverance or recurrence of a specific” behaviour towards a desired outcome “in spite of the ceasing of the originating stimulant [and] in spite [of possible] opposing forces or effort involved” (Psychology Dictionary 2016). Research by Le Foll and Rasclé (2006) points to a correlation between increased persistence and having greater self-control, ability to access resources, and relatedness of the goal to intrinsic goals, needs, and values (587).

6.3 IMPLICIT AND EXPLICIT MOTIVES

6.3.1 Implicit Motives

According to Schultheiss (2008), implicit motives are “motivational dispositions that operate outside of a person’s conscious awareness and are aimed at the attainment of specific classes of incentives and the avoidance of specific classes of disincentives” (604). Implicit motives, being subconscious, contribute to the problematic nature of self-reportage on motivation. Implicit motives “cannot be measured through self-report...[,] interact with situational motives to shape behaviour...and have a pervasive effect across several layers of psychological functioning” (Schultheiss 2010, xvii-iv). Simply put, “Implicit motives [subconsciously] orient, direct, and select attention” (Woike and Bender 2009, 704). Further, according to Woike and Bender, personality research shows “Implicit motives are...linked to intrinsic incentives (i.e., enjoying an activity for its own sake), and are predict[ive of] long-term behavioral trends, or cognitive styles” (702). Research in this area is focused on “how people’s needs and desires, and the manner in which they pursue their goals, result in pathways towards wellbeing” (Bender, et al., 375).

Generally implicit/explicit implicit motive orientation can be seen as a continuum that situates “agentic and communal motivational preferences” at either end (Bender, et al., 376). Within this continuum there are various “general classes” of implicit motivation that serve to explain motivational tendencies. In McClelland’s Needs Theory (which overlaps with aspects of Cognitive Evaluation Theory and Organismic Integration Theory as discussed below), implicit motives fall into three general classifications: *achievement*, *affiliation*, and *power* (McClelland 1987, 221-410). These general classes help to explain why certain motives engage the attention

of a particular class of individuals. Woike and Bender describe this as “a heightened sensitivity to motive-relevant cues” (712).

“*Achievement orientation*” refers to the implicit motivation to be independent and achievement oriented in goal pursuit (Schultheiss 2008, 604). Woike and Bender add that achievement orientation involves a need “to meet a personal standard of excellence” and involves a desire for ongoing personal growth (711). Research suggests that development of such behaviour traits results from exposure to learning environments in which subjects were forced to work “independently” towards goals that were challenging, yet “not beyond the reach” of the effortful use of capabilities and resources. Research suggests that as children, achievement-motive individuals were rewarded with “positive affection” when successfully reaching a specific goal that later corresponded to their “intrinsic feeling” of positive valence in goal pursuit. This experience fostered the ability to derive satisfaction from the “autonomous mastery of challenging tasks throughout life” (Schultheiss 2008, 606). As a result, these motivational traits become implicit. These implicitly motivated individuals prefer formative feedback in relation to how they are doing at a given moment in relation to their previous work. They are not motivated to seek feedback that compares their effort with others. In short, they are self-motivated towards personal growth and are indifferent toward the incentive of competition as motivation (606).

Research suggests that an individual’s implicit motive orientation falls somewhere between two possible motivational orientation dimensions, namely “*active*,” or towards intrinsic pleasure, and “*active avoidance*,” away from fear (Schultheiss 2008, 613). According to McClelland (1987), each motive classification spans a range from high (attractiveness) to low (avoidance). This helps to explain why some achievement orientated individuals act on motives because they find

intrinsic pleasure in achieving goals, while others are motivated to act towards achieving goals, which bring relief through acting in order to avoid failure (Schultheiss 2008, 613).

“Affiliation orientated” individuals are implicitly motivated to excel at tasks which involve “cooperation” in groups and “social approval,” and they do “poorly” at tasks which are “competitive” (Schultheiss, 609). As with implicit achievement orientation, affiliation orientation has two dimensional poles. At one end affiliation orientated individuals may act on motives in “hopes of success”; however, others may act towards a goal due to an implicit need to avoid “fear of rejection” (613).

“Power orientated” individuals demonstrate a “capacity to derive pleasure from physical, mental, or emotional impact on others” (Schultheiss, 610). Power orientated individuals demonstrate highly competent interpersonal skills such as persuasion, appearing competent, and use of paralinguistic gesturing to emphasize discourse. This may result as a way of avoiding overt signs of aggression to seek dominance over others, which are inevitably negatively received. Power orientated people include those who are competitive, extroverted, extreme risk takers, attention seekers, and leaders (McClelland, 224-50). However, power motive orientation also is positively correlated with sharing and teaching (Woike and Bender, 712, Schultheiss 2008, 613). Power orientation, as with each of the other orientations has two dimensional poles. There are power-orientated individuals who are “active” motivated in pursuing intrinsic pleasure associated with goals while others are motivated by fear in “avoiding...appearing weak” in the pursuit of their goals (Schultheiss, 613).

As discussed, there are both active and active-avoidance incentive dimensions related to motive orientation. Studies also suggest a third incentive of “*passive-avoidance*” (Schultheiss, 614). Fear of success, intimacy, or other motive orientation goal related outcomes could repel an individual to act on motivation because “learned” negative outcomes (according to their personal history) warn them of potential negative valence. Passive-avoidance incentives include fear of rejection, failure, success, or power (McClelland, 373-408). Schultheiss suggests that “[i]mplicit motives are more likely to predict performance measures than choices or judgements, and explicit motives are more likely to predict choices and judgments than performance” (619). However, he cautions that it is too early to apply this “across the board.”

Implicit motives are more likely to be “engaged” by “non-verbal cues...[than] verbal cues” (620). This suggestion is supported by Woike and Bender, who write, “implicit motives are particularly attuned to the information processing of non-verbal stimuli” (712). Achievement-, affiliation- and power-motivated individuals become engaged and “committed” to goal pursuit through goal imagery (e.g., the experience of watching others and paralinguistic gestures that “cue implicit motives”) (Schultheiss 2008, 620). This is due in part to the connection between implicit learning and the brain’s mirroring system (see Chapter 4).

Woike and Bender explain that motive orientation does not simply direct attention when it is cued, it also aids in memory consolidation of information perceived as meaningful. For example, those who are power- and achievement-orientated will notice “differences” between aspects of perceived information, while affiliation-orientated individuals will notice the “similarities” (712). This has a significant effect on what is memorized and may explain how people with different implicit motive class remember a shared experience differently. Further, “*motive-*

relevant memory” recall is enhanced in similar contexts to those in which the memory was first consolidated. In fact, research suggests that the context under which an individual forms motive-relevant memory can activate the goal without an individual’s conscious awareness and subsequently influence their decision-making (Ferguson, Hassan and Bargh, In press).

6.3.1.1 Receptor Field Plasticity

Another consideration in the cueing of motive-relevant memory is receptor field plasticity. Research in this field suggests that our experiences (memories) help shape our senses, in that they do not merely indiscriminately transmit perceived environmental information, they also “provide information” about the “character” of the information if repeatedly exposed to the stimulant (context dependency) (Gilbert, et al., 622). “Spatial Integration and Cortical Dynamics” by Gilbert, Das, Ito, Kapadia, and Westheimer (1996) suggests:

[Receptive properties in] the adult primary visual cortex are capable of integrating information over a much larger portion of the visual field than was originally thought. Moreover, their receptive field properties can be altered by the context within which local features are presented and changed in visual experience. (615)

According to Wilson, Fletcher, and Sullivan (2007), “Perceptual learning results in a form of implicit memory that allows for enhanced perceptual discrimination (perceptual acuity) of previously experienced stimuli” (29). Further, Kellman and Massey (2013) write, “A wealth of research now supports the notion that, with appropriate practice, the brain progressively configures information extraction in any domain to optimize task performance” (122). This is significant in that one’s implicit motivations may help to select and shape what we perceive and remember. This is a cyclical relationship in that these perceptions and memories, in turn, shape motivation.

6.3.1.2 Receptor Properties and Representations of Intent

Receptor property research illustrates that the brain is proactive: perceptions (meaningful information) are evaluated subconsciously in order to predict events and make choices on how to act before the decisions (“representations of intent”) are sent to the individual’s consciousness. The incredible speed at which this occurs in facilitates bodily actions in relation to real time and space, which moves at a slower speed (Dietrich 2013). In a way, the self is constantly creating itself through these “illusions of intent” it manufactures before acting on them (2013). The question here is whether or not the conscious self in perceived real time ought to be the sole focus of creative research as it usually is.

6.3.2 Explicit Motives

A simple way of distinguishing between implicit and explicit motives, described by Kehr (2004), suggests a “Push-pull metaphor: implicit motives ‘push,’ whereas explicit motives ‘pull’ the individual” (482). According to Woike and Bender, “explicit motives are people’s (conscious) self-attributed goals and values that are activated by extrinsic incentives (i.e., receiving a reward for an activity), and are best suited to predict behavior occurring in well-structured situations that are rich in social incentives and require a cognitive decision on the course of action” (702).

Social norms and self-attributed self-beliefs have also been suggested as explicit motives.

Schultheiss (2008) writes that explicit motivation refers to conscious “cognitive and affective processes” such as “explicit learning” and “subjective” motivational valence (621). According to

Schultheiss:

Explicit motives...preferentially respond to verbal-symbolic cues and influence declarative measures of motivation, that is, measures that tap into a person’s verbally represented sense of self and the attitudes, judgments, decisions, and goals associated

with it. Valence judgments, choice behaviour, assessments of self-regulatory control, and personal goal listings are all examples of declarative measures of motivation. (621)

6.3.3 Cognitive Flexibility and Implicit/Explicit Motivation

Implicit and explicit motivation can act “independently” or together in various ways. Ferguson, Hassin, and Bargh (2008) assert that this type of “cognitive flexibility” is a characteristic of both conscious and subconscious goal pursuit. They suggest that implicit and explicit goal pursuit “operate in the same way” (153) in that people “adapt evaluations of their goals” to changing internal and external environments automatically, which reflects recent research on the “adaptive nature of automatic processes” (154-5). Conversely, Kaplan, Van Damme and Levine conclude “that people’s goals, whether universal or individual, systematically shape what they attend to and remember” (2012).

According to Schultheiss (2008), some examples of the cognitive flexibility associated with implicit and explicit motivation may include:

1. experiences of positive valence associated with acting towards an explicit goal that corresponds to one’s implicit motives. In this case, the likelihood of success is heightened. For example, this may occur when a jazz music student who is affiliation-motivated is put into a collaborative performance-education environment to facilitate acquisition of domain skills.
2. experiences of negative valence when an explicit goal does not correspond to one’s implicit motives. In this case, one is less likely to succeed in goal pursuit. For example, when the same affiliation-motivated jazz music student is put in a learning environment devoid of collaborative opportunities in order to acquire new, verbally transmitted domain skills.

3. situations in which non-verbal concepts and experiences are labeled with language, such as the way in which a jazz musician explicitly teaches what he or she implicitly knows (procedural skill) to a student.
4. situations in which verbal information is consolidated in the imagination as non-verbal information, such as the way in which the jazz student consolidates what has been transmitted verbally as non-verbal knowledge.

6.3.3.1 Implicit-explicit Congruency

Congruence, or the lack thereof, between implicit and explicit motive is shown to affect personal wellbeing. For example, being both consciously (explicit) and subconsciously (implicit) motivated in goal pursuit contributes to wellbeing through congruency. On the other hand, if subconscious and conscious goals are at odds, this can result in “tension experienced as emotional distress” (Bender, et al., 375). Kehr writes, when “implicit and explicit motive systems are associated with low intrapersonal conflict, intrinsic motivation, and successful performance—the preconditions for happiness, wellbeing, and health” occur (488). He adds, “Congruence of implicit motives, explicit motives, and perceived abilities is associated with flow experiences” (see Csikszentmihalyi 1975, and 1988).

6.3.3.2 Self-coherence and Implicit/Explicit Motives

A related issue, in terms of wellbeing and in the perception of motivation is *self-coherence*. As explained in Chapter 4, motive-relevant memory plays a significant role in the way individuals perceive their self-identity (Woike and Bender, 713).

The implicit aspects of motivation make it difficult for individuals to reliably self-report on what drives them. However, understanding an individual’s subconscious motivational tendencies is

key to facilitating learning strategies, including self-management, and providing safe, supportive environments that foster positive creative growth and wellbeing. Therefore, according to Schulthies (2008), rather than relying on the “limits of humans’ introspective access to the real causes of their behaviour...motivational needs that drive behavior as well as the effects of these dispositions on behavior need to be assessed with indirect methods (which, ironically, are often more direct than asking people what they believe they are doing, or what they believe causes their behavior)” (644).

Complicating matters even further, recent research suggests that decisions are made at a more preconscious level than originally thought. Benjamin Libet’s 1999 research in Hood (2012) shows that both “automatic behaviours” and “intentional behaviours” (as explicit motivation) are “triggered by external events...[and that the] feeling [of] intention occurs after the fact” (129). According to Libet’s (1999) research, “Human subjects became aware of intention to act 350–400 ms after RP [readiness potential] starts, but 200 ms before the motor act. The volitional process is therefore initiated unconsciously” (47). Libet suggests this research raises the question of free will, in that free will “would not initiate a voluntary act, but it could control performance of the act” (47).

6.4 ENVIRONMENTAL DIMENSIONS OF MOTIVATION

The self may be the agent of motivation; however, its shaping and initiation occur in a complex relationship between biology, affect, and social context, as will be discussed in this section. The environment provides a context that shapes memories and knowledge (which form needs, goals and values) and fuels the ongoing motivational cycle in which creativity and wellbeing occur. This section will explore physiological and psychological needs, intrinsic versus extrinsic

motivation, instrumentality, algorithm versus heurism, and throughout, the relationships of these concepts and associated theories to creativity and wellbeing.

6.5 PHYSIOLOGICAL AND PSYCHOLOGICAL NEEDS

Psychologist Abraham Maslow devoted much of his research to understanding the creation of the self, emphasizing that individual basic needs depend on interdependent internal and external resources. Maslow believed people are “perpetually wanting,” implying that motivational “drive is related to the state of satisfaction or dissatisfaction of other drives,” and as such, the “integrated wholeness of the organism” must be considered along with any theory on motivation (Maslow 1943, 370). He understood that Motivational Needs Theory, while reflected in behaviour, is not synonymous with behavioural theory. “While behavior is almost always motivated, it is also almost always biologically, culturally and situationally determined as well” (371).

According to Maslow’s well-known hierarchy, there are six levels of motivational goals, which he called *basic needs*: physiological, safety, love, self-esteem, self-actualization and self-transcendence (added later in his career). Maslow believed these interrelated basic needs “arrange themselves in hierarchies of pre-potency. That is to say, the appearance of one need usually rests on the prior satisfaction of another, more pre-potent need” and that less pre-potent needs “are minimized, even forgotten or denied” (370). When a need is fairly well satisfied, the next pre-potent need emerges, in turn to dominate the conscious life and to serve as the center of organization of behavior, since gratified needs are not active motivators. Maslow claims that his needs, although not culturally universal, are “relatively *more* ultimate, more universal, more basic, than the superficial conscious desires from culture to culture, and make a somewhat closer

approach to common-human characteristics. Basic needs are *more* common-human than superficial desires or behaviors” (390).

In relation to the resources and provisions required for needs, he adds, “Any thwarting or possibility of thwarting of these basic human goals, or danger to the defenses which protect them, or to the conditions upon which they rest, is considered to be a psychological threat” (Maslow, 395). He elaborates, “With a few exceptions, all psychopathology may be partially traced to such threats. A basically thwarted man may actually be defined as a ‘sick’ man, if we wish” (359). Here Maslow is, in fact, connecting the concept of wellbeing to resources, freedoms and human rights.

6.6 INTRINSIC AND EXTRINSIC MOTIVATIONAL ORIENTATION

Intrinsic motivation and *extrinsic motivation* can be understood as two ends of a continuum that is complex and that involves other overlapping and interconnected implicit and explicit motivational incentives. Understanding this continuum allows insight into specific kinds of motives that guide orientation and that promote (or do not promote) wellbeing and the creative process. Various theories express aspects of this continuum. According to Coon & Mitterer (2013), “Intrinsic motivation occurs when we act without any obvious external rewards” (331). Intrinsic motivation involves that we simply “enjoy an activity or see it as an opportunity to explore, learn, and actualize our potentials” (Ryan 2009, 339). Information perceived in one’s environment is interpreted as relevant to the Self, and people’s natural “tendency towards psychological growth and development [that] is also fuelled by intrinsic motivation” (1-2). At the opposite end of the motivational continuum lies “[e]xtrinsic motivation, [which] refers to our

tendency to perform activities for known external rewards, whether they be tangible (e.g., money) or psychological (e.g., praise) in nature” (Brown 2007, 141-51).

6.6.1 Intrinsic Motivation, Creativity and Wellbeing

6.6.1.1 Cognitive Evaluation Theory

Cognitive Evaluation Theory “describes the individual differences in how people have a tendency to orientate towards environmental aspects and regulate behaviour in various ways” (R. Ryan, 2). Cognitive Evaluation Theory also refers to the “social and environmental factors that facilitate versus undermine intrinsic motivation” (Ryan and Deci 2000, 70). Although a person’s intrinsic motivation is natural, it only flourishes when three basic psychological needs are met and supported by one’s social environment. These are *autonomy*, *relatedness* and *competence* (Ryan 2009). According to CET, a supportive, safe, non-controlling environment is essential in fostering these three psychological needs. Ryan and Deci assert, “when satisfied, [autonomy, relatedness, and competence] yield enhanced self-motivation and mental health and when thwarted lead to diminished motivation and wellbeing” (Ryan and Deci, 68).

6.6.1.2 Autonomy

The Theory of Self Determination (TSD) defines *autonomy* as “endorsing one’s actions at the highest level of reflection” (Ryan, Kuhl and Deci 1997, 708), whereas *control* is defined as feeling pressured to think, feel, or behave in specific ways. Stated differently, autonomous orientation describes an internal motivation towards an interest, whereas control orientation describes an orientation toward social control or reward motivators. Niemiec and Ryan (2009) write, “Autonomy refers to the experience of behaviour as volitional and reflectively self-

endorsed” (135). It “ultimately determines the quality of motivation” (K. Adams 2005).

Autonomy is linked to intrinsic motivation.

6.6.1.3 Competence

According to Niemiec and Ryan (2009, 135), “*competence* refers to the experience of behaviour as effectively enacted...[when individuals] feel able to meet...challenges.” Competence is underpinned by autonomy in that effectively enacted behaviour needs to be “self-endorsed.”

Impersonally orientated (versus intrinsically oriented) people are “characterized by [a focus on] anxiety concerning competence” (Ryan 2009, 2). TSD and CET are also related to Vroom’s Expectancy Theory in that motivation hinges on the expectation that capabilities that meet challenges will lead to desired outcomes if the effort is put forth (Vroom 1964). However, people may be motivated to engage in activity simply to “experience” competence. It also has similarities to Broom and Self’s research about potentiality intensity; if people perceive that their skills are insufficient to achieve a goal, their motivation to act is reduced.

6.6.1.4 Relatedness

The reciprocal relationship between personal growth and intrinsic motivation seems to be biologically, emotionally, and socially shaped. The tendency to be intrinsically motivated begins at birth and involves seeking out “challenges, novelty and opportunity to learn,” and it serves individuals’ instincts to “take on and attempt social practices that surround them” (Ryan 2009, 2). *Relatedness* refers to the “intrinsic social need that directs people’s interest toward the development of relational bonds and toward a concern for interpersonally valued and culturally relevant activities” (Deci and Ryan 1991, 242). Relatedness manifests as a sense of belonging, purpose, and responsibility within a social group such as a community. Therefore, it moderates autonomy in that it helps an individual determine where his or her own freedom extends and

where another's freedom begins. It balances a first-person viewpoint with compassion and respect towards others and is thus important to the development of *self-transcendence*.

Intrinsic motivation is desirable for creativity and wellbeing. First, intrinsic motivation is facilitated at a biological level by the brain's reward center. In terms of creativity, "Activation of this center [nucleus accumbens] allows for more" associate brain centers to be involved in the creative process. Associate brain centers are brain areas that contribute heavily to the generation of creative ideas and metaphorical thinking. (Carson 2010, 50-1). Secondly, intrinsic motivation is connected to knowledge acquisition (learning for learning's sake), and domain skill mastery (autonomy, relatedness, competency). Key conditions that support to intrinsic motivation occur when provisions and resources meet challenges, when a safe and supportive social and physical environment is present, when control is self-managed, and when there is time and space for curiosity, imagination, and exploration.

Boedecker, Lampe and Riedmiller found "intrinsic rewards lead to better system performance in more complex tasks requiring creative solutions" (Boedecker, Lampe and Riedmiller 2013). Further, a study by Sheldon, Kennon, Ryan, Deci and Kasser (2004) followed several artists over twenty-plus years to illustrate the long-term effect of intrinsic versus extrinsic motivation on their careers and found that long-term extrinsic motivation "might actually hinder eventual success." The researchers reported:

In the early nineteen sixties, students at an art school were asked about their feelings toward work, the focus being on "whether they were more intrinsically or extrinsically motivated." Using this research as a benchmark, the students were revisited in the nineteen eighties and were asked "how their careers were progressing." The findings were clear. "The less evidence of extrinsic motivation during art school, the more success in professional art both several years after graduation and nearly twenty years later." Those intrinsically motivated found "the joy of discovery and the challenge of creation

were their own rewards, were able to weather the tough times—and the lack of remuneration and recognition—that inevitably accompany artistic careers.” Further, “Those artists who pursued their painting and sculpture more for the pleasure of the activity itself than for extrinsic rewards have produced art that [ironically] has been socially recognized as superior.” The study concluded, “It is those who are least motivated to pursue extrinsic rewards who eventually receive them.” (485)

In terms of wellbeing, according to Ryan (2009), when the needs of intrinsic motivation are met (e.g., autonomy, relatedness, competency), “people experience more vitality, self-motivation, and wellbeing.” Ryan considers this “necessary and essential to vital, healthy human functioning regardless of culture or stage of development” (1-2). Intrinsic motivation is what fuels us, within a culture, towards finding an autonomous voice that boosts our self-confidence, self-worth, and sense of connectedness to others, and sense of meaningful contribution to a cultural heritage that values each individual. Thus, creativity is shaped by social context and motivation that is based on the internal need for, or the joy of, creating for its own sake, regardless of whether the outcome includes rewards, attention, or increased status.

6.6.2 Extrinsic Motivation, Creativity and Wellbeing

6.6.2.1 Organismic Integration Theory

Organismic Integration Theory is concerned with the types of behaviour linked to the internalization of various extrinsic motivators that are “instrumental in the development of cultural practices” (Ryan 2009, 1). These fall “along a continuum of *internalization*. This continuum includes external regulation (rewards, attention), internal introjection (ego or fear satisfaction), identified regulation (finding importance in activity), and integrated regulation (“synthesiz[ing] identifications with other aspects of the self”) (3). The more internalized the

extrinsic motivation, the more autonomous the person will be [or feel] when enacting the behaviours (1).

This can negatively impact wellbeing in that some of these types of extrinsic motivators impede self-actualization and self-transcendence and “suppress [authentic] intrinsic motivation” (Harmon-Jones, Gable and Price 2012). After reviewing 128 studies, Deci, Koestner and Ryan concluded, “The primary negative effect of rewards [or other extrinsic motivators] is that they tend to forestall self-regulation. In other words, reward contingencies undermine people’s taking responsibility for motivating and regulating themselves” (Deci, Koestner and Ryan 1999, 659). This has a profoundly negative effect on the capacity for growth as far as self-esteem, self-actualization, self-transcendence and critical agency are concerned, all of which impact the capacity for creativity.

6.6.2.2 External Forces

As previously discussed, cognitive flexibility, along with risk-taking, is known to be important to creativity. As Hofstadter points out, this involves using our ability to “stop defending patterns of reasoning forever and take a leap of faith” (1979, 192-3). However, social forces can play a significant role in how one orientates his or her motivation, often hampering the cognitive flexibility needed to switch points of view and contribute to creative wellbeing. For example, Harmon-Jones, Gable, and Price emphasize that “external rewards can decrease cognitive flexibility in problem solving [as well as] decreas[ing] performance on complex tasks” (2012).

Amabile also concluded that extrinsic rewards imposed on the creative process have negative outcomes. Part of her research involved the following study of professional artists:

[They were asked to] “randomly select ten commissioned works and ten non-commissioned works they made....The art works were given to a panel of successful artists and curators who knew nothing about the study, and they were asked to rate the pieces on creativity and technical skill....Our results were quite startling....The commissioned works were rated as significantly less creative than the non-commissioned works, yet they were not rated as different in technical quality....Moreover, the artists reported feeling significantly more constrained when doing commissioned works than when doing non-commissioned works. (Amabile in Silverthorne 2002)

Rewarded subjects often have a harder time seeing the periphery and crafting original solutions

(see also *Cognitive Scope* above). Amabile’s maze analogy illustrates this idea:

To understand the differences between extrinsic and intrinsic motivation, imagine a business problem as a maze. One person might be motivated to make it through the maze as quickly and safely as possible in order to get a tangible reward, such as money, the same way a mouse would rush through for a piece of cheese. This person would look for the simplest, most straightforward path and then take it. In fact, if he is in a real rush to get that reward, he might just take the most beaten path and solve the problem exactly as it has been solved before. That approach, based on extrinsic motivation, will indeed get him out of the maze. But the solution that arises from the process is likely to be unimaginative. It won't provide new insights about the nature of the problem or reveal new ways of looking at it. The rote solution probably won't move the business forward. (1998, 80)

Amabile (1985) described six social factors with potential to strongly and negatively impact creativity. All are associated with extrinsic motivation. They are: “evaluation, surveillance, reward, competition, restriction of choice, and time pressures” (394). An example that can be used to illustrate these negative social factors is the culture-industry-controlled production of commercial music in contemporary society. Culture industries (external motivators) may pressure artists to follow algorithmic models of creation in their tasks because commercialism places value on creativity through the fickle and narrow scope of consumer appeal. “This is exactly what is happening in industrial production of culture according to the reasoning of the Frankfurt School...Symbol creators in the copyright business follow an algorithm that fulfill certain criteria and hence are commercially successful in the marketplace” (Wikström 2013, 28-9). Moran and John-Steiner note behaviours that reflect “utilization of the social and cultural

tools and best “fit” with the social and cultural expectations of their time” (Moran and John-Steiner 2003, 10) are often seen as the “most” creative as they are usually the most ‘successful.’ However, as just explained, this does not reflect behaviour associated with SCWB.

In terms of formal and informal creative learning environments, Amabile (1992) writes, “The standard tools we’ve relied on for so long in parenting and teaching, evaluation, reward, competition and restriction of choice, can in fact destroy creativity” (79). Similar sentiment is shown in the research of Deci, Koestner, and Ryan (1999): “engagement-contingent, completion-contingent, and performance-contingent rewards significantly undermined free-choice intrinsic motivation” (627). Further, “in creative tasks, the presence of strong extrinsic rewards can lead to diminished activity after said rewards have been devalued. More specifically, the activity will be lower than it would have been had the subject never received any extrinsic reward in the first place” (Harmon-Jones, Gable and Price 2012, 2).

Again, a musical example illustrates this point. Music students can be tempted or influenced to align their knowledge acquisition and creative process to industry needs in classroom settings. This is detrimental to creative wellbeing. Within a commercial music market, for example, an artist’s music must usually fill requirements within a narrow scope of acceptable creativity in order to be heard (restriction of choice). Once it is heard, its success is measured by the percentage of popular vote it generates or amount of revenue that its license generates (evaluation and competition). Success is rewarded extrinsically, with money, fame, or physical and documented reminders of one’s success such as awards or publicity. The unfortunate outcome of this process is that “money may work to buy off intrinsic motivation for an activity. And this decreased motivation appears not to be temporary” (Deci 1971, 114). Also, the

normalization of extrinsic motivation in popular culture can result in an inauthentic sense of autonomy and this can be detrimental to creative wellbeing.

6.6.2.3 Regulation

Ryan (2009) has explained how motivation orientation affects not only motivation itself but also self-regulation and autonomy. While it should be pointed out that there are certain extrinsic motivators, such as non-controlling informal comments of praise directed towards someone's creative behaviour, that are shown to have a positive extrinsic influence on one's intrinsic motivators without undermining them (Ledford, Gerhart and Fang 2013, 20), Ryan's research has shown that extrinsic motivators have a predominantly negative effect on wellbeing. They result in "diminished self-motivation and greater ill-being; in fact, need thwarting is entailed in the aetiology of many forms of psychopathy" (R. Ryan 2009, 2). "In other words, people for whom it is highly important to amass wealth, present an attractive image, and become popular or famous tend to report ill-being, including greater anxiety, depression, narcissism, psychosomatic symptoms, conduct disorder, and high-risk behaviours, as well as poorer self-actualization, self-esteem, vitality, and social functioning" (Kasser 2009). Further, Ryan illustrates that "this applies cross culturally in that whether collectivist or individualist, male or female, people function most effectively and experience greater mental health when their behaviour is autonomous rather than controlled" (2).

One set of studies by Kasser, et al. (2013) showed "Across all three studies, results supported the hypothesis that people's wellbeing improves as they place relatively less importance on materialistic goals and values, whereas orienting toward materialistic goals relatively more is associated with decreases in wellbeing over time" (1). A fourth study by the group showed self-

esteem rose as material motivation diminished (1). MIT researchers concluded that this is one of the most solid findings in social science (Ryan 2009). Pink (2009) goes one step further by calling these findings among the most “robust in social science and the most ignored.”

6.6.3 Heuristics and Algorithmics

Amabile asserts that creative behaviour should be “heuristic rather than algorithmic” (see Chapter 3 for heuristic research). Heuristic tasks are cognitive endeavours that require time in order to develop a unique path to the goal. Heuristics also involve the intuition of individual(s) regarding accountancy for the wider context in which cognitive endeavours (such as creativity) take place (Laszlo and Krippner, 59-60) (see Chapter 3 for earlier discussion). In contrast, algorithmic tasks are those in which clear guidelines (step by step procedures) are to be followed to a prescribed idea of success. Amabile characterizes algorithmic behaviour as less creative by saying, “An artist who follows the algorithm and paints pictures of different sorts of children with large sad eyes, using dark-toned backgrounds” would not be producing creative paintings, even if each painting was unique and technically perfect (Amabile 1992).

Research by economists at the Massachusetts Institute of Technology (MIT), the University of Chicago, and Carnegie Mellon University show a connection between algorithmic tasks and extrinsic motivation: “extrinsic rewards can be effective for mechanical skill—those that depend on following an existing formula to its logical conclusion” (Pink 2009). However, for creative behaviour that requires rudimentary cognitive skill or higher cognitive skills such as “flexible problem-solving, inventiveness, or conceptual understanding,” extrinsic rewards can be dangerous, “even leading to poor performance” (Pink).

6.7 ENVIRONMENTAL IMPACT ON MOTIVATION AND THE SELF

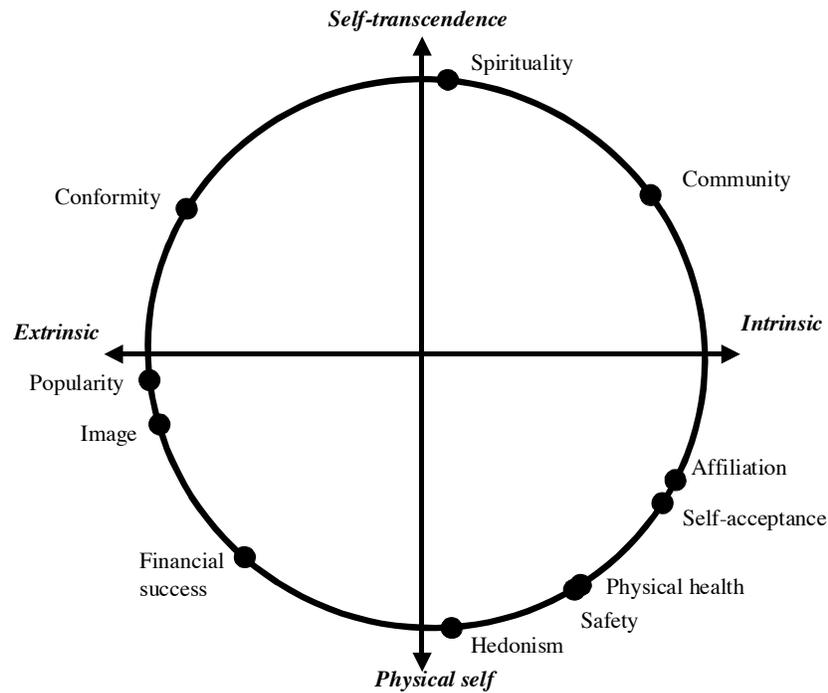
Motivation can be about what individuals' and groups' intrinsic needs, values, and goals are, or how they orient themselves towards extrinsic ends. Self-identity “authorises, anticipates, and guides social action” and creative action, and is therefore an important motivation consideration (Tileagă 2013, 93). Individuals identify and categorize themselves as individuals and groups in order to provide a “mediator” between “context and action” (89). This suggests the construction of the self is a process that involves the reciprocal relationship between body and environment driven by the motivation to self-identify and function in a social environment. Although there are biological contributors to consider e.g., genetics, possible epigenetics, cognitive style, intelligences, temperament, etc., much of the shaping process of self-identity happens in relation to external factors, that is, the context within a social environment that the self is situated. Self-identity is an ongoing process of “construction and reconstruction” within the “context of a complex relational system” of “social practices” (88-9). A metaphor that encapsulates this idea is found in South Indian Classical music in which each “sama” (first beat of tala, the cyclic rhythmic form of the music) represents not the end but a new beginning. The idea of a perpetually evolving life can be thought of in the same way in which jazz trumpeter Don Cherry describes sama, “There always is [sic] beginnings...never an end...music never stops” (Lavezzoli 2007, 332).

Society provides a context, in constant flux, in which multiple overlapping cultures and groups exist, in which a range of social identities belonging to an individual can be called upon to serve social needs between the individual and the group or individual interaction takes place. We are social actors with many faces. Our values and needs, ideas about progress and growth are served

by these multiple identities and thus warrant consideration. What type of discourse, in the form of socio-cultural knowledge, motivates individuals to form beliefs, values, and goals? Exploring these questions may determine not only creative-wellbeing but also, ultimately, the quality of life we live.

Kasser's Circumplex Model of Values, shown in Figure 5 below, summarizes the relationship between intrinsic and extrinsic motivation and self-transcendence and the physical self and related motives and behaviour.

Figure 5. Circumplex Model of Values (Kasser 2009, 28)



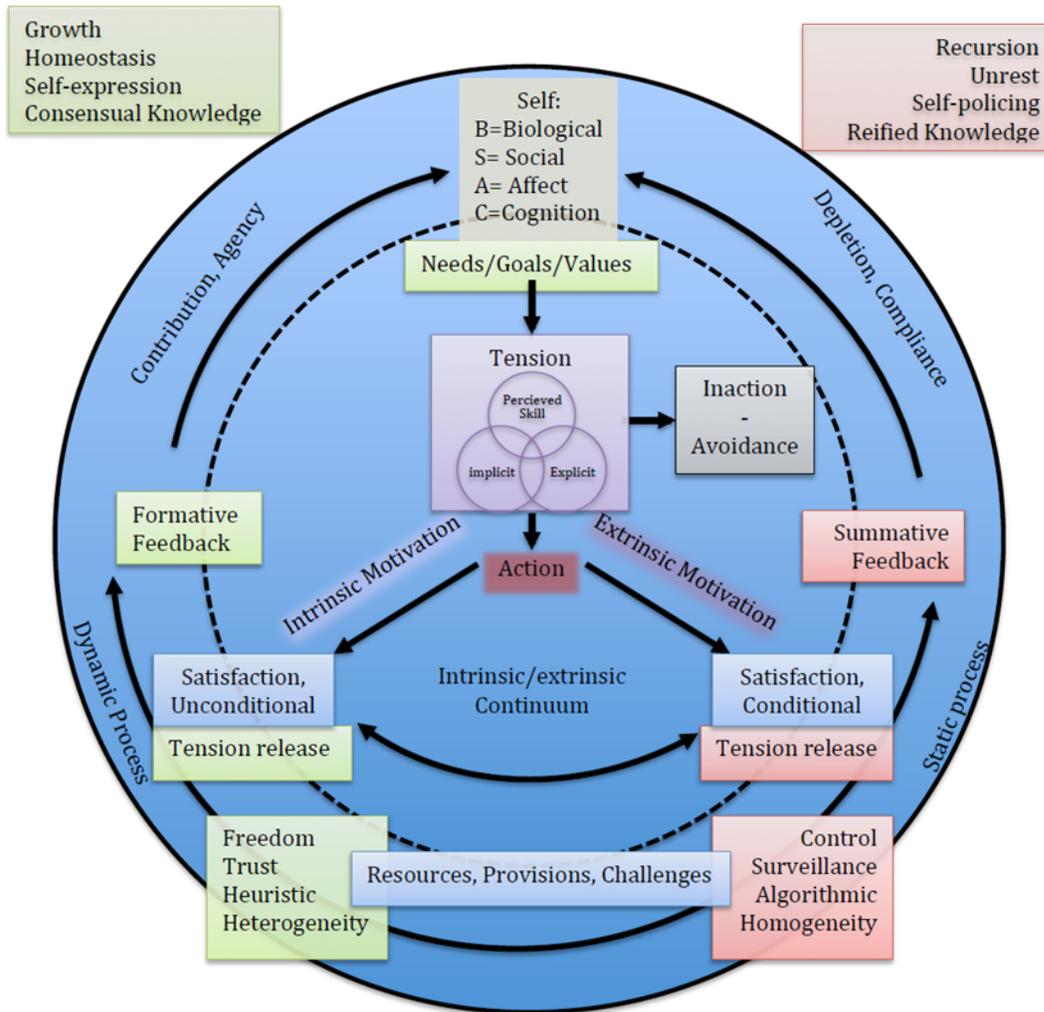
6.8 IMPLICATIONS

This chapter has outlined the fundamental biophysical, affective, cognitive, and social, determinants of the motivational process while also describing how motivation underpins and is interwoven with the creative process. The following proposed Motivation Subsystem of SCWB in Figure 6 summarizes the motivational cycle. It should be kept in mind that fluid, ongoing, multiple, overlapping and competing motivational goal pursuits, which can influence each other, co-exist. As such, this model is representative of a single goal pursuit:

1. The outer ring represents the environmental subsystems of SCWB e.g., social, physical, temporal and social constructs within: domain, culture, society and dominant ideologies.
2. The dotted inner ring represents the *personal organization realm* of motivation, which is permeable (influenced by and influencing the environment).

- The *self*, including its *physiological, cognitive, affect, and social* dimensions, is situated between the inner and outer ring to illustrate that motivation is shaped through the reciprocal relationship between self and environment.

Figure 6. Motivation Subsystem



- Resources* and *provisions* in the environmental subsystems may either facilitate and contribute to, or impede and undermine, *capabilities* and *intrinsic motivation* in varying degrees.
- Needs, goals, and values* (including habits and implicit motives) illustrate the information that engages motive class arousal.
- Motivational arousal is illustrated as *tension*.

7. *Inaction*, or *passive-avoidance*, illustrates the decision not to pursue a goal.
8. *Action* represents the decision to engage, orientate, and organize behaviours in pursuit of conscious or subconscious goals. The quality of such action is impacted by the congruency between the intersecting circles of *perceived ability*, *implicit motives* and *explicit goals*.
9. Motivational orientation is depicted as a continuum from *intrinsic* to *extrinsic*.
10. *Goal Satisfaction*, depending on the motivational orientation, is labelled either as *accumulated through process* or as *reward contingent*.
11. *Tension release* illustrates rest at the point of goal attainment. The *green* shaded area represents outcomes associated with intrinsic motivation, while the *red* shaded area represents those associated with extrinsic motivation.
12. *Dynamic* and *Static* represent two ends of a knowledge continuum. *Dynamic* is fluid, consensual knowledge, associated with intrinsic motivation, and *Static* is ahistorical, reified knowledge associated with extrinsic motivation.
13. *Freedom, trust, heuristics*, and *heterogeneity* refer to context provisions, such as creative risk-taking or openness to new ideas, shown to foster and facilitate personal growth and full scope capabilities. *Control, surveillance, algorithmics, homogeneity* refer to context provisions shown to limit personal growth and steer motivation toward utility.
14. *Contribution* and *agency* on the one hand, and *depletion* and *complacency* on the other, refer to reciprocal relationships between the self and the environment that are associated, respectively, with intrinsically motivated and extrinsically motivated goal attainment.
15. *Growth and homeostasis* and *recursion and unrest* summarize the outcomes of the processes associated with intrinsic and extrinsic motivation, respectively, as they relate to wellbeing.

The cognitive aspects of motivation discussed in this chapter have several implications for the creative process. Creative “beginners,” or students in any field, very frequently find themselves with longer-term or less well-defined creative goals, for which they consider themselves to lack capability (perceived skills) or resources. These goals, we have learned, are motivationally difficult. Artistry and mastery seem distant, especially when one begins to understand what one cannot yet do, and this is disheartening. Where wellbeing is concerned, a frequent thwarting of a sense of self-efficacy, or the expectation of that thwarting because of perceived skill insufficiency, will have a detrimental effect on motivation and, by definition, on self-esteem. This negative-affect experience (or expected experience) will also lower valence, in addition to weakening motivational intensity. The resultant low motivation will affect the ability to solve the

capability problem, thus cyclically thwarting self-efficacy and creativity. How can creative learners, or anyone, avoid being caught in this cycle? Motivation could be heightened and persistence increased by leveraging knowledge of motivational cognition.

First, goal prioritization and hierarchy may increase persistence by creating coherence between goals, linking explicit goals to implicit motives, and aiding the transfer of new knowledge acquisition to long-term memory. That is, the brain is able to track, over time, when smaller goals are associated with higher-level, personally relevant goals, and it is also able to assist in building competence toward those goals in the longer term. More conscious awareness of those connections may help learners, for example, to increase self-control and to persist.

Additionally, realization of specific sub-goals with a narrower cognitive scope may induce post-goal positive states leading to the wider cognitive scope more suited to aspects of creative thinking such as making connections between ideas towards insight. Again, awareness of that process may assist artists, learners or teachers to work constructively with (rather than fight) opportunities to focus more broadly or narrowly over time. It cannot be overstated that pre-goal, high-affect incentives such as grades or money increase memory narrowing and work against building long-term competence. The implications for creative learning are evident, but they also run counter to a long-standing systemic emphasis on summative evaluation and the trend toward “incentivisation” in North American schools (Sandel 2013, 52).

Third, motivation is enhanced when goals are specific, achievable within a reasonable time frame, and considered to be possible given the capability (perceived skills) and resources of the person. Beginners and students require the opportunities and resources to build capability and

experience this type of goal satisfaction. Additionally, they may also experience a sufficient enough sense of self-efficacy through the realization of smaller goals (for example, learning the melody and chord progression in a new song) to improve valence and motivational intensity toward a broader, longer-term goal (improvising creatively over all songs with similar elements). This reinforcement of self-efficacy and the perception of connection to implicit motives would also contribute to creative and personal wellbeing.

Fourth, perceptual learning and motivation are enhanced through implicit-explicit motivational congruency. Facilitating such congruency and coordinating it with learning strategies facilitates aspects of perceptual learning connected to positive valence, enhanced information sorting and retrieval, improved memory consolidation, recall, and memory prediction, which are all crucial to the creative process. If it is understood that non-verbal cues engage implicit motives while verbal cues engage explicit motivation, creative learning environments can be developed that account for this. Face-to-face multi-sensory perceptual learning is crucial for the fostering of the type of wide knowledge acquisition needed by creative learners. Such learning contexts facilitate the engagement of implicit motives through visual imagery, align explicit goals with implicit motives, consolidate verbally transmitted information into implicit knowledge, and help to explicitly communicate implicit knowledge.

Fifth, subconscious aspects of motivation, e.g., readiness potential, implicit motivation, and self-coherence make self-reporting of one's own motivational behaviour difficult. This research suggests that self-assessment within creative domains be critical, in that individuals should develop mindful awareness of their motivational orientations and of the alignment of implicit

motives with explicit goals to aid in positive valence. Further, this approach aligns with self-directed, and self-managed (intrinsic) motivation, critical for creativity and wellbeing.

However, this suggests that critical self-assessment of one's own temperament and related implicit motive class may help in the management of the creative process. Management may include awareness of motivational goal orientation, and related behaviours in order to align learning contexts with implicit motives, intrinsic needs, goals, and values, in that creative wellbeing is facilitated. This also facilitates a healthy self-determination and ongoing control over the creative process.

Specific aspects of the relationship between motivation and creativity impact wellbeing directly. For example, self-regulation of motivation, discussed in detail in Chapter 7, is shown to be a key to the filtering and managing of intrinsic versus extrinsic motivators where creativity is concerned. It impacts perceptual learning, openness to learning experiences, cognitive fluency and flexibility (retrieval, sorting, and consolidation of relevant information as long term knowledge, including formation and navigation of mental referents), making connections, sustained focus and determination. It also plays a role in facilitating "mindfulness," "flow" and "zone," known contributors to creative wellbeing.

It has also been shown that when challenges do not exceed resources people have a better chance, and feel more positive about attempting to organize and initiate behaviours towards desires, growth, and ensuing periods of homeostasis. The role of locating of support, trust, a sense of responsibility, and freedom within one's environment is central to motivation. These are core resources and provisions that facilitate creative risk taking, progress and growth. The continuum of autonomy and control describe the intrinsic and extrinsic motives that

orientate related motivational behaviours and subsequent agency or utility. Over time, this orientation determines whether motivational behaviour includes contributions back to community, society, and environment, or whether it depletes these areas, setting up a reciprocal relation in which environmental factors control motivation and in turn deplete an individual's own motivational impetus and agency.

Another aspect of wellbeing is associated with the benefits of intrinsic motivation, which includes enhancement of self-regulation (see Chapter 7). Self-regulation and agency are key components of a healthy creative process. The ability to focus with intensity, persist, retrieve, sort, and consolidate meaningful information as domain relevant knowledge long-term memory hinges on intrinsic motivation and implicit motives being congruent. Extrinsic motivation undermines this (unless it reinforces intrinsic motivation and implicit motives), forestalling potential growth and wellbeing. Therefore, learning environments should facilitate congruency between intrinsic motivation and implicit motives in order to foster self-determination and relatedness and to match perceived competency with appropriate challenges, provisions, and resources.

Table 2 summarizes key aspects of, and differences between, intrinsic and extrinsic motivation.

Table 2. Summary of traits associated with intrinsic and extrinsic motivation

Intrinsic Motivation	Extrinsic Motivation
Freedom	Control
Autonomous orientation	Control orientation
Agency	Utility
Full scope capabilities	Task-specific skills
Internal mediation/regulation of self	External mediation/regulation of self
Mindfulness	Lack of mindfulness
Heterogeneity	Homogeneity
Zone or flow	Anxiety driven
Facilitates long-term memory consolidation, cognitive fluency and cognitive flexibility	Inhibits long-term memory consolidation, cognitive fluency and cognitive flexibility
Consensual knowledge and memory	Reified knowledge, manufactured memory
Heuristic	Algorithmic
Open	Closed
Trust	Surveillance
Process as an end in itself	Means to an end
Relatedness, connectedness to others	Competition with others
Formative assessment, self-endorsed	Summative assessment, reward contingent
Periods of homeostasis	Continual unrest

Intrinsic motivation affords a reciprocal relationship between individuals and their domain community or cultural members, increasing a sense of responsibility and connectedness that contributes to everyone's wellbeing. Thus, there is a heterogeneity of creative ideas that are shared freely, which in turn may inspire others in their creative goal pursuits. Another benefit is that by keeping commercialism at bay, the possibility of fragmentation (the disembedding of the use value of creative ideas and objects) is diminished, allowing for all aspects of the creative process, not simply the exchange value, to contribute to society. Finally, and importantly, this reciprocity, sharing, and use value orientation also sends a message that everyone, not only those who are professionals, can have a creative life.

Ultimately human motivation is underpinned by an innate need to meet basic physiological and psychological needs. The need to form self-identities, as individuals and as groups function to provide mediators between the corporeal self and social environment. This need is reflected in the physiological, cognitive, affect, and social determinants of both the self and motivation systems. Creativity involves the facilitation of the expression of intrinsically motivated ongoing construction and reconstruction of self-identity. Through this process, this the benefits of aesthetic learning, such as personal and cultural growth can occur. In addition, a system of motivation illustrates the self and environment should be considered together when wellbeing is discussed. A reciprocal sense of responsibility, and active contribution between self and social environment ensure creativity and creative wellbeing. The innate joy, construction of self, and active contribution to one's social environment found through self-directed creativity is left to languish when motivation via extrinsic rewards predominates.

In sum, it is clear that motivation is biologically, emotionally, cognitively, socially, and situationally determined. Therefore, the exploration of motivational behaviour should account for the self in a social environment. The concluding remarks in the 2013 research by Kasser, et al. read:

Specifically, cross-cultural studies show that self-transcendent values and intrinsic goals (for one's own personal growth and freedom, for close, connected relationships with loved ones, and for benefiting the wider world) are consistently antipodal to self-enhancing values and extrinsic goals for money, status, wealth, etc. intrinsic aims in life are also associated with higher levels of personal need satisfaction and wellbeing.... Further, recent research...suggests that merely activating self-transcendent, intrinsic aims might suppress the extent to which people prioritize materialistic aims, at least in the short term. Thus, researchers and practitioners might begin to develop interventions, and to support public policies, that encourage people to place relatively more importance on self-transcendent and intrinsic aims in life, rather than the accumulation of more wealth and possessions. (20)

7. SELF-REGULATION

As has been shown in earlier chapters, the creative process includes acquiring, consolidating, retrieving, and demonstrating fluency and flexibility with an internal knowledge base. This shared cultural knowledge, shaped by cultural members according to their changing needs, gives intelligibility to shared ideas and is balanced by the knowledge that comes in part from leaps of faith, stepping outside the confines of a given framework in hopes of perceiving contrasts and encountering novelty. Existing knowledge is, therefore, continually reshaped through each new experience. Such a process is facilitated by self-trust, self-determined competency, and openness to new experiences, including intercultural dialogue, aesthetic learning, and drawing on affective areas of self-narrative. Embodied cognition, in the form of mind-body-tool, whereby the self-system is extended beyond the body to include skillful (domain expertise) use of tools aids this process. In many creative endeavors, such as improvisation, the processing of information and production of novel ideas must be done with efficiency and clarity, in real time and changing circumstances.

These things benefit from behaviour such as action and thought that is intrinsically motivated, sustaining and directing attention, patience, resilience, and perseverance, a broad non-judgmental awareness. Underpinning this creative thinking is a relaxed mental state and evaporation of a sense of public self-awareness. These things remind us that self-actualization is a process involving an open self-system, subject to both internal and external influencers, and this is a necessary quality for creative growth. However, the obvious point here is that growth entails an element of risk, found especially in the shape of social forces and inherent stressors. Some stressors appear monumental, such as the economics-politics-technology-creativity assemblage,

but however monumental the idea of overcoming these obstacles seems, in most cases these environmental stressors are contingent and, as such, can be confronted in ways that effect change in a positive way, both internally and externally. Bandura (1999) summarizes this scenario writing:

The imposed physical and sociostructural environment is thrust upon people whether they like it or not. Although they have little control over its presence, they have leeway in how they construe it and react to it. (6)

If impositions are construed as contingent, critical agency can be asserted to affect positive change. This includes developing skills and strategies that foster and facilitate psychophysiological states that lower stress and anxiety. Bandura writes, “the structure of a self-system and the regulatory processes must work together in human functioning” (6). This chapter will show the need for self-regulation, and in particular, Learned Self-Regulation (LSR) in order to facilitate healthy creative behaviour such as risk taking, improvisation, and flow. The implications include an examination of the types of decision-making that impede these same aspects of creativity and impede LSR itself. The SCWB systems model is suggested as a resource for mindful decision-making in this area.

7.1 LEARNED SELF-REGULATION

According to Gard, et al., *self-regulation* refers to “efforts of monitoring, willpower, and motivation to manage or alter one’s incipient responses and impulses so as to pursue or maintain explicit goals or standards” (2014, 1). If self-regulation is managed consciously, through the application of skills and strategies, then the term *learned self-regulation* applies. Wilson and Cummings (2015) explain that LSR refers to the processes by which individuals “maintain a healthy, natural body/mind” (1). More specifically, self-regulation of responses to stimuli and

ensuing cognition and behaviour, including goal pursuit and emotional regulation, plays a critical role in psychophysiological wellbeing. Further, LSR is a holistic approach, separating it from simplistic notions that creative wellbeing is simply a result of conscious personal choices (as shown in Chapter 6, understanding one's own motivational behaviour is at best, difficult).

According to Gard, et al., "Regulation is proposed to occur via continual adjustment and guidance of one's behavior" (8). This involves "maintaining a fairly constant environment [homeostasis], to avoid dysregulation (2). This idea is also emphasized by Gillett, Gavin, and Savelli (2016) who write, to "achieve optimal health, it is necessary to attain balance or harmony between the individual and the environment" (203). As has been explained throughout this paper, homeostasis hinges on the ongoing interaction between self and environment. Wilson and Cummings explain, "Humans are open systems...[meaning] they require constant adjustment to internal and external demands...[because] they are open to influences from outside the system" (6).

Homeostasis within the self and environment is not equally attainable or available to everyone since people rarely have total control of choices and their outcomes (due to temperament, motivation (in part a subconscious process), and environmental and social constraints, e.g., forms of inequality and power relations). As discussed earlier the idea of choice always should be put in context, against the backdrop of political, ideological, social, educational, economic, cultural, circumstances. LSR can provide skills and strategies from which to address these "social determinants of health" (Gillett, Andrews and Savelli, 176), which objective measurements of wellbeing, e.g., GDP, do not (See Appendix A). This approach to wellbeing is consistent with The National Center for Complimentary Alternative Medicine (NCCAM), which recognizes the

benefits of alternative medicine as “Mind-body therapies, which assume that stress, psychological coping styles, and social supports primarily determine health and disease” (202).

7.2 DYSREGULATION

In order to self-regulate, there must be a way for individuals to recognize when they are not regulated. LSR helps individuals to recognize potential threats in the form of “negative feedback.” Negative feedback is explained as information about the self-regulation system containing “discrepancies” about the “function” of the system by which “adjustments” can be made to the system to regulate it in accordance with a “reference value” (Wilson and Cummings, 6), namely homeostasis. According to Luszczynska, et al. (2006), learned self-regulation allows individuals to manage the demands of information presented to the self in the form of these “negative feedback loops” (306).

At its worst, inability to recognize and self-regulate negative feedback results in dysregulation, the “malfunction” within the self-regulation system, which is a “state of pathology” (Wilson and Cummings, 1). Two types of dysregulation are distress and eustress. Negative dysregulation, or distress, may involve emotional information about malfunctions in the system such as feelings of stress, depression, and anxiety. Stage fright is a common example of a specific anxiety a musician, dancer, actor, public speaker, or other performing artist may suffer. Positive dysregulation, or eustress, can occur when, for example, after receiving extrinsic rewards such as getting an A grade, some individuals’ euphoric feelings can cause a reduction in motivation to continue learning. Both distress and eustress impede creative wellbeing in areas such as mindfulness; flow; cognitive focus and persistence; and knowledge acquisition, retention, and consolidation. They can result in increased neuroticism (Robinson 2007), and pathologies such

as narcissism, seeking, and greed in order to pursue external rewards and resultant states of euphoria. LSR can provide individuals with strategies and skills for detecting problems related to psychophysiological self-regulatory aspects of creative wellbeing, even for those unaware they have problems (4), such as those whose extrinsically-determined motivations have become self-perceived as intrinsic.

7.3 SELF-REGULATION AND MOTIVATION

Self-regulation and motivation are interconnected and interdependent systems. In fact, the self can be considered to be a complex “goal directed system” (Luszczynska, et al., 556). Wilson and Cummings subdivide motivational self-regulation into emotions, cognition, and personality Dodge, Daly, Huyton and Sanders (2012) have attempted to define wellbeing “as the balance point (homeostasis) between an individual’s resource pool and the challenges faced.” The *resources* and *challenges* are the same: 1) psychological, 2) social, and 3) physical (230). “[C]ognitive and behavioral challenges in goal pursuit: goal setting and goal striving” as identified by Mann, Fujita, and de Ridder (488) were discussed in Chapter 6 (Motivation). Here, research focusing on self-regulation related to emotions, attention and personality in creative-process motivational management is explored.

7.3.1 Emotion and Attention

According to Wilson and Cummings, emotion refers to the “interaction of one’s physiological and psychological processes that one feels or experiences and labels” (133). Guard, et al. explain emotional regulation as:

the management of the felt experience of emotions, both positive and negative in valence, its behavioral expression, and associated autonomic output, through cognitive reappraisal and through a process of non-appraisal that involves awareness alone, a form of attentional control that does not involve evaluation or judgment. (8)

The emotional regulation system can be understood as a three-area system that engages psychological and neurological systems (including autonomic: sympathetic and parasympathetic systems). These encompass other systems: 1) The “*threat and protection*” systems, 2) “*drive, resource seeking and excitement* systems”, and 3) “*contentment, soothing and safeness* systems” (Gilbert 2009, 200).

According to Gilbert, within the threat systems, common “[o]ver and underdevelopment of sensitivities in threat-protection underpin many psychopathologies” (201). Similarly Gard, et al., write “Overactive or inefficiently managed homeostatic responses can lead to cumulative wear and tear on the body and brain” (10). The threat system is engaged outside of consciousness via neurotransmitters adrenalin and cortisol (stress) and through “heightened sensitivity and over activity” commonly causing distress. Gilbert’s explanation of how the interrelated threat and drive systems are fueled by the neurotransmitter dopamine systems, when imbalanced, can be used to illustrate how creative wellbeing can be impeded. He states:

Some individuals pursue status, material possessions and achievement in order to feel safe and avoid feelings of rejection, subordination or inferiority. They may feel the need to prove themselves and to be constantly achieving....status seeking, competitiveness and working to avoid rejection are all linked to the drive system. (201)

According to Gilbert, “research suggests that a specialized affect regulation system (or systems) underpins feelings of reassurance, safeness and wellbeing” (199). The soothing system is “particularly sensitive to interpersonal cues of social safeness, acceptance and being cared for. It is also key to the regulation of the drive and threat protection systems” (202). “Contentment is associated with a sense of peacefulness, wellbeing and quiescence—a state of ‘not seeking’” (202). The system “operates through an opiate and oxytocin system. Oxytocin is a neurohormone

linked to feelings of affiliation, trust and feeling soothed and calmed within relationships” (202). Therefore, in terms of creativity, social relationships within the creative domain or culture, and one’s ability to regulate associated affective responses, will have a significant positive effect on creative wellbeing.

Additionally, emotion regulation is critical to creative wellbeing as “fear can stop growth in cells and puts them into protective mode” (Wilson and Cummings, 134). According to Derakshan and Eysenck (2008), the “experience of anxiety involves having various task-irrelevant thoughts (e.g., self-preoccupation, worry), and these task-irrelevant thoughts affect performance by reducing the amount of attention available to be allocated to a central ongoing task” (169). As discussed in previous chapters, anxiety and reduced attention have implications related to creative risk-taking; cognitive efficiency, flexibility and fluency; knowledge acquisition, consolidation, and retrieval; and motivational management. LSR can mitigate stress associated with those aspects of creative behaviour because it helps people to avoid distractions and stay on course or to recover focus quickly after attention distraction. That is, LSR may aid in alleviating attention bias (see Chapter 3) in individuals who suffer from performance anxiety or other maladaptive psychophysiological responses to negative feedback during the creative process.

The fear of not fitting in or of not achieving an external standard illustrates extrinsic motivators that undermine intrinsic motivation (part of Gilberts “drive, resource seeking and excitement” system). This unfortunate outcome can be seen in individuals who have a fear of creative *risk taking* or *improvising* and whose creative potential is consequently “diminished” by this particular type of anxiety and fear (51); that is, they are being “hijacked” by an over stimulated amygdala. “Hypersensitivity in the limbic system leads to a lower threshold for excitation and/or

an excessive response...to events at a higher intensity” (Wilson and Cummings, 134). The brain, no longer able to remain calm and alert, cannot access associate brain area knowledge, consolidate experiences to long-term memory, or allow for the openness needed when faced with new experiences.

Table 3. Fear and its consequences to creative wellbeing

Fear and Consequences to Creative Wellbeing
Diminished long term memory formation, subconscious parallel processing (diminished knowledge base development and mindful self-narrative)
Diminished openness to new experience (risk taking, personal growth)
Outward orientation and mediation of the self (diminished self-regulation, and autonomy)
Increased stress, anxiety (diminished ability for non-identity, or attenuating concern for self or being present)
Diminished agency
Diminished ability to be focused (ability for flow, zone, and mindfulness is undermined)
Diminished self-acceptance and self-trust (diminished self-esteem, self-actualization, self-transcendence, and diminished intrinsic motivation)

7.3.2 Personality

According to Wilson and Cummings personality consists of (cognitions), feelings (emotions) and behaviour (107). They summarize personality as:

How a person thinks, feels and behaves is a culmination of: a genetically based predisposition to perceive and respond to events, which interacts with one’s learning experiences which modify one’s perception, interpretation and responses to the demands of any given situation. (116)

Type A personalities have characteristics including “a high sense of time urgency, highly competitive, polyphasic, achievement orientated [who have an] external locus of control” [and a] “poorer health status [than those who have an] internal locus of control” (Wilson and Cummings, 115). Those with an internal locus of control (Type B) are more likely to be self-regulated people who exhibit a “sense of commitment...meaning in their lives...and openness to change” (115-16).

The idea of being open to change, one of the central prerequisites for the creative process can be linked to Kornfield's (2009) words on identity: "The less we cling to ideas of self, the freer and happier we will be" (63). Therefore, self-regulation in terms of personality is inextricably linked to health and wellbeing.

Clearly, self-regulation of emotional, cognitive, and motivational systems is a key component in creative wellbeing, and learned self-regulation is an important set of strategies and skills that should be facilitated in support of the creative process. In contrast, self-commodification, impulsivity, chronic reflexivity, psychosocial disembedding, extroversion, extrinsic motivation, hyper individualism, and self-reliance, all contingent states of the "successful" neoliberal globalized citizen, may impede the very creativity and wellbeing those ideologies claim as desirable.

7.4 TOP DOWN AND BOTTOM UP LSR

The two main types of LSR are termed *top down* and *bottom up*. Top down or cognitive LSR can be understood as the "conscious" and "deliberate" "control of intentional/motivational drive (e.g., goal-setting and maintenance), working memory, attention, executive monitoring, response inhibition, reappraisal, and meta-awareness" (Gard, et al., 13). Alternately, bottom up self-regulation refers to the modulation of one's "response to stimuli without recruiting executive center" (14).

7.4.1 Top Down LSR

Top down LSR is accomplished through an initiated "setting [of] standards" and "monitoring" used by individuals to "control, alter, or override" motivational responses to impulses, with

responses that are in line with behaviour directed towards meeting desired goals and outcomes (Luszczynska, et al., 556). The most common approach to top down LSR strategies and skills is mindfulness.

7.4.1.1 Mindfulness

Mindfulness is our inherent capacity of healing and renewal. It is the basis for transforming ourselves and creating a more harmonious family and society. To be mindful is to be aware of what is going on in our body, in our feelings, in our mind and in the world, as we avoid doing harm to ourselves and others. (Hahn 1992, in Rosenbaum and Magid 2006)

Langer (1989) explains mindfulness as 1) creation of new categories; 2) openness to new information; and 3) awareness of more than one perspective (62). Brown and Ryan (2003) assert mindfulness is analogous with “open or receptive awareness and attention”. Zanto and Gazzaley (2009) write, “Mindfulness involves active self-regulation of thoughts in the present moment, and a positive state orientation” (1). This includes the uncoupling of sensory experience from self-narrative in order to cognitively reappraise feedback from experiences in less emotional terms (Hayes, et al. 2010, 7). Kornfield suggests mindfulness involves *non-identification*. He writes, “Non-identification means that we stop taking the experience as ‘me’ or ‘mine.’ We see how our identification creates dependence, anxiety, and inauthenticity...in practicing non-identification...we are free to let go and rest in awareness itself” (105). In all the conceptions of mindfulness described above, the characteristics parallel many already discussed as beneficial to creativity.

Mindfulness underpins the LSR skill of positive *reappraisal*, a strategy for regulating negative emotional feedback; “learning to reframe experiences (e.g., from discomfort to sensation), teaching a more objective, observational, and non-judgmental (similar to a mindfulness

technique) stance to one's experience" involving understanding the "subjectivity and impermanence of experiences" so as to reduce perceived stress (Gard, et al., 13). Maslow (1970) equated motivationally driven self-transcendence with *peak experience*: "experiences as end-experiences rather than as means-experiences...[that involve] non-evaluating, non-comparing, or non-judging cognition...; [that are] ego-transcending, self-forgetful, egoless, unselfish...; [that are] self-validating and self-justifying ([carrying] its own intrinsic value with it) ...; [that facilitate] lack of consciousness of time and space; [and] that are reflective of a readiness and willingness to "listen" and to "hear" (26-7). Mindfulness has been shown to be an effective LSR practice for individuals no matter where within the Big 5 model of personality tendency continuums they fall (extraversion-introversion, neuroticism, agreeableness, conscientiousness, and openness) (Robinson, 223). Feltman, Robinson and Ode (2009) research findings reveal mindfulness "is particularly beneficial among distress-prone (neuroticism) individuals...[and] may play a broad role in [personality] trait linked vulnerabilities of multiple types" (959).

Awareness and attention are the two central dimensions of consciousness and, as we have learned, they are also significant to creativity. Awareness has been described as the overseer of consciousness, a continual "monitoring [of] the inner and outer environment" (822). Awareness acknowledges stimuli but does not necessarily bring it to the focus of attention. Attention focuses awareness, bringing perceived information into a narrower cognitive focus underpinned by heightened affect. In mindfulness, awareness and attention are interconnected, like the foreground and background in a painting; figures may appear from the background and then recede again. "One tries to be aware but detached from all sensations as they arise and pass away" (Brown and Ryan, 822). Attention is central to mindfulness, but as Kabat-Zinn (1994)

suggests, mindfulness involves “paying attention in a particular way: on purpose, in the present moment...[but] nonjudgmentally” (4). Baer (2003) suggests that the non-judgmental observation applies to both “internal and external stimuli as they arise” (125).

Awareness of and attention on internal stimuli facilitates objective self-observation. Objective, non-judgmental self-observation can facilitate “meta-cognitive insight” (Teasdale, Segal and Williams 1995). Kornfield writes, “[W]ith mindfulness, we can direct our attention to notice what is going on inside us, and study how our mind and experience operate” (37). For example, according to Baer, this can help in the “recognition of the consequences of behaviours [that may contribute to] effective behaviour change, including reduction of impulsive, maladaptive behaviours” (129). Brown and Ryan point out *mindful self-awareness* differs from “*public self-consciousness*, [see self-perception theory] the tendency to be concerned [may be associated with anxiety and related external motivation orientation] about the self as perceived by others, which may detract from present awareness” (823).

As previously discussed in relation to self-coherence or the self-narrative, when the mind is “at rest” the brain can process aspects related to the “self and the social environment” in the areas of the brain Carson term the “me center” and send this information to the part of the brain termed the “executive center to be used in decision making” (Carson, 48). Mindful decision-making “encompasses a range of inhibitory response behaviors, such as overriding impulses, habits, or cravings, employing approach-focused coping, and facilitating ethical behavior” (Gard, et al., 8). This is invaluable during the creative process.

Along with affording individuals the ability to attend to meaningful things and be less distracted, mindfulness also affords the reduction of “the physiological and psychological effects of stress, correlates with emotional intelligence, and improves wellbeing and happiness” (Vorhauser-Smith, 13). Similarly, Davidson and Lutz found that mindfulness resulted in “less activation of the amygdala” (associated with anxiety, and stress), suggesting that sustained, calm, non-judgmental attention correlates with a “significant decrease in emotionally reactive behaviors that are incompatible with stability of concentration”. They also suggest this “might help to reduce ‘neural noise’” (180).

Aspects of mindfulness, then, may facilitate creative process tasks because they benefit the cognitive flexibility and openness of thought that enable access to knowledge in associate brain areas that can contribute to creative insight. Additionally, they allow for objective self-observation and mitigate emotionally reactive behaviours and public self-consciousness that impede creative wellbeing. There are several common methods of attaining a state of mindfulness.

7.4.1.1.1 Meditation

According to Gard, et al. meditation involves “withdrawing of the sense of vision away from distraction, while the focus of one’s attention inward and on body sensation contributes to the withdrawing of the other senses from distractions” (6). Within this framework, distraction refers to the loss of selective attention and focus on sensory experience outside of a single point or prescribed focal points. These focal points, or objects of practice, may be objects of visual or other sensory types of attention. This form of intentional concentration on particular sensations and not others is understood as inhibitory control—the ability to sustain attention on meaningful

information and disregard irrelevant information from the external and internal environment. According to a Luszczynska, et al., attention regulation helps people to “delay gratification, tolerate change, and create the cognitive and behavioural response to selected stimuli exclusively” (306). They add that [t]his selective aspect of attention, regarding both environmental and self-related sources, is a backbone of self-regulation of goal-directed activities across changing circumstances” (306).

According to Baer, it is the calm mental state facilitated by mindfulness that affords “control of attention, a useful skill for individuals who have difficulty completing important tasks because they are distracted by worries, memories, or negative moods” (129). This calm alert mental state is critical in “comprehension and long term memory formation” (Vorhauser-Smith, 13). In fact, research by Davidson and Lutz (2008) showed “meditating for tens of thousands of hours... [resulted in] long-term practitioners altering the structure and function of their brains,” including an increase in grey matter in the hippocampus associated with learning and memory (174). This is reminiscent of Eriksson’s 10,000-hour theory of becoming an expert (see Chapter 3). Specific consequences of the brain structure “rewiring” found by Davidson and Lutz (2008) included heightened and “minimal effort” in “sustained attentional focus” and an ability to “attend to moment to moment” stimuli without being caught in the moment (178).

7.4.1.1.2 Imagery

The attention facilitated through mindfulness underpins the skill of *imagery*, referring to “visualization and mental rehearsal” (Wilson and Cummings, 188). This is an invaluable skill in the creative process, especially for those in performance. This skill, underpinned by attention, works on this premise:

anything that is vivid enough in the mind becomes reality for the body [think of biting into a lemon or hearing nails scraped across a chalkboard!]...Vivid visualization and mental rehearsal can then be used to create useful changes in our physiology and ultimately our psychological state. (189)

7.4.1.1.3 Desensitization

Another strategy that is shown to be useful in the regulation of emotion and performance is *desensitization*, (introduced in Chapter 4), which “involves exposing yourself to the thing you’re afraid of over and over again, in manageable doses” (Cain, 126-7). This is the opposite of the “just jump in” approach, which does more harm than good for high reactive people.

Desensitization fosters a gradual acceptance of self and experience.

The acceptance fostered by desensitization is a key characteristic of mindfulness. According to Hayes (1994) acceptance involves “experiencing events fully and without defense, as they are” (30) and contributes to reducing fear of new experiences. It relates to “aspects of the Openness to Experience dimension of personality,...which involves receptivity to and interest in new experiences” (Brown and Ryan 2003, 823). Having an open mind “prohibits rigidity” and provides space for the use of “personal standards...used when evaluating situations” (Vorhauser-Smith 2011, 7). Research indicates openness and self-determined evaluation are reflective of “psychologically healthy individuals” (7). Acceptance also facilitates a willingness and eagerness to learn from mistakes (learning by doing) and to look at obstacles as challenges (Treffinger, et al. 2002). Clearly, this is critical in mitigating fear through desensitization. Maslow (see Chapter 3) suggested that such “autonomous and courageous” behaviour helped people to overcome “fears” of the “rigid pressures of society” (383) and was self-actualizing in nature.

7.4.1.1.4 Social Capital and Compassion

LSR strategies include understanding how meaning is perceived as stressful (recognizing patterns of interaction, interdependence and inequality), is shaped by experiences over time, and has a social coefficient. This involves developing skills that can be used towards positive management or change of negative social forces.

Individuals use two general coping strategies to moderate stress emanating from the social environment. One strategy, social comparison, involves “positive comparison of one’s self with...peers...who are on similar life courses” (Pearlin and Staff McKean 1996, 243). A second strategy is the moving of a problematic and stressful domain, such as long term unemployment, to a place lower on the priority list (243). However, these coping strategies are underpinned by behaviours such as avoidance and negative judgement of others and do little to effect positive social-environmental change. Knowledge of how these coping strategies are related to social inequalities that constrain status, identity, and mastery processes that threaten mental health (McLeod 2015, 155) can help towards developing LSR strategies and skills for mindful change.

Social support, shown to be positive in shaping a sense of meaning and purpose in the lives of individuals, needs to be fostered (Pearlin and Staff McKean, 243). LSR strategies should foster conditions of instrumental, expressed, and perceived positive social support, which are shown to have a “moderating role in the stress process” and of which perceived social support is shown to be the most effective in stress management (L. I. Pearlin, 408). This resource is instrumental in shaping communities that provide a sense of meaning and purpose/self-worth, a basic human need. A sense of self-worth contributes to preserving positive identities by which inequality's effects can be resisted. According to Snow and Anderson (1992), the need for meaning and self-

worth “coexist even at the most rudimentary levels of human existence.” They are necessary for for “survival because [they] enable those situated at the bottom to salvage their humanity.” Their research calls into question Maslow’s assertion “that the satisfaction of physiological and safety needs is a necessary condition for the emergence and gratification of higher level needs” (157).

The data discussed in this dissertation also suggests the coexistence of meaning and self-worth as rudimentary needs. However, negative feedback that manifests itself as distress or disorder can severely impair the degree to which individuals and groups can develop a sense of self-worth and meaning. Adam’s (2007) research on chronic reflexivity (see Chapter 5) illustrates this well (33-47). The relationship between aspects of “identity,” “stressors,” and “resources” can be used to “implicate mental health inequalities,” “social destination” (or status), and devaluation processes within problematic social conditions (McLeod, 228), such as those in neoliberal society.

Along with social support, the degree to which individuals *feel* they “can control the forces that shape their [dynamic and fluid] lives” (L. I. Pearlin, 410) is also important in moderating stress (see also Riff’s environmental mastery theory, Chapter 2). Ensuring access to these resources, as part of learned self-regulation, will at times require social activism. Mindfulness and activism converge as two sides of the same coin in groups such as the Buddhist Peace Fellowship, which attempts to “cultivate conditions for peace, social justice, and environmental sustainability within ourselves, our communities, and the world.” Their “purpose is to help beings liberate themselves from the suffering that manifests in individuals, relationships, institutions, and social systems” (Buddhist Peace Fellowship 2012). Vorhauser-Smith states, “When we are mindful, we are tuned in to people, conversations and the accompanying emotions in our environment—we are ‘in the

moment” (12). Once again, this requires non-judgmental attentiveness. However, as Kornfield points out:

much of the time we don't attend in this way. Instead we continually react, judging whether we like, dislike, or can ignore what is happening. We evaluate ourselves and others with a stream of expectations, commentary, and criticism. (96)

Through mindfulness, we acknowledge our social dimension and are presented the opportunity to self-transcend. Behavioural regulation related to self-transcendence is rooted in what Gard, et al. describe as “wisdom based contemplative practice [in which] emotion regulation, self-reflection, and information integration...are strategies affecting ethical decision making” (8). These traits can facilitate “improv[ing] self-other interactions and therefore contribute to ethically informed pro-social behavior...e.g., increased empathic behaviour” (8). Improving self-other relations, e.g., “Trust, civic participation, group membership, and so on” (181), facilitates and fosters reciprocity in the shape of “Social support [which] has been shown to have protective effects on mental health...including depression” (Gillett, Andrews and Savelli, 184-5). Gilbert (2009) suggests pro social behaviour facilitated through developing *compassion skill strategies*, in turn, are ultimately skills used in LSR.

According to Gilbert, “Emotional imbalance can be in part addressed through developing compassionate attributes and skills directed at the self...[such as] sensitivity, sympathy, distress tolerance, empathy, non-judgement” (203). His research points to a societal lack of compassion skills such as effort appreciation: “Many high shame and self-critical clients have never learnt this effort appreciation. Unfortunately, we are living in a society that has become more

contemptuous of rewarding effort and in which many believe that ‘second is not good enough; who remembers who came second?’” (204)

Gilbert also asserts the importance of compassion skills as emotional self-regulation skills:

1. Compassionate attention: Looking for and focusing on the positive qualities of self and others. Refocusing attention from stressors so as to enjoy the present (203).
2. Compassionate thinking: Developing a balanced way to reason about the world. Targeting and managing “shame and self critical thinking” [in] how people reason, ruminate and reflect on their current mood states, their future and their sense of self” (204).
3. Compassionate behaviour: “Helping people become more process focused rather than task focused...[Helping] people focus on their efforts rather than their results”(204).
4. Compassionate imagery: “The client imagines [and practices] themselves as a highly compassionate person and explores their sense of age, facial expressions, body postures, voice tones and styles of thinking” (204).
5. Compassionate sensation: “explore feelings in their bodies when they focus on being compassionate, experiencing compassion from others and being self compassionate” (205).

Compassion skills research can draw support from research related to brain systems such as the mirror system, involved in the horizontal transmission of culture, emotional learning, empathy, and compassion (see Chapter 4). Compassionate behaviour, including mirroring of positive facial expressions, is associated with the anterior insula and contributes to empathy. One of the functions of this part of the brain, according to Wilson and Cummings, “is to be an inner voice to guide us to act in line with our important values” (132). They describe one study in which the use of positive mindset skills in self-regulation is supported by research that speaks to the effects of emotion on one’s environment:

strong emotion (anger/joy/compassion) had a direct linear and measurable effect....This suggests that the emotions you hold can contribute negatively or positively to your

environment.... Positive emotions such as love encouraged more robust growth in functioning cells, while negative emotions such as fear put them in a protective mode that prevented healthy growth. (131)

A summary of top-down (mindful) LSR skills and strategies and their benefits is provided in Table 4.

Table 4. Top down LSR skills and strategies

Top Down (Mindful) LSR Skills and Strategies	
Meditation	<ul style="list-style-type: none"> • Purposeful attention: being present; positive state orientation-positive reappraisal; open/detached awareness and attention regulation (ability to control what is brought to focus); ability to sustain single point of focus • Inhibitory control overrides impulses, habits, or cravings • Non-identification: mindful objective self-awareness; draws senses away from distractions; recognition of consequence of behaviour
Imagery/Visualizing	<ul style="list-style-type: none"> • Vivid mental rehearsal can translate into adaptive changes in physiological and psychological states • Non-judgmental reframing of experiences
Desensitization	<ul style="list-style-type: none"> • Exposure to object of fear in manageable doses. Valuable for individuals with high reactive temperament • Acceptance of self and experience: experiences are subjective and impermanent; openness to new experiences; willingness and eagerness to learn from mistakes and challenges
Pro Social-Compassion	<ul style="list-style-type: none"> • Looking for positive in self and others; developing a balanced way to reason about the world by reducing shame and self-critique • Ability to attenuate expectations, commentary, and criticism of others; becoming process focused; practice benefitting from visual imagery and physical sensations related to compassion behaviour; promotes growth and wellbeing in self and others even at the cellular level

7.4.2 Bottom up LSR

As introduced, bottom up LSR aids in the regulation of behaviours and actions that are, according to Mann, et al. (2013), “automatic and operate without conscious intent or monitoring” (488).

7.4.2.1 Breathing

For example, according to Wilson and Cummings, “breathing is considered to be the cornerstone of Learned Self-Regulation” (168). Similarly, Gard, et al., state, “breath regulation is a key tool for impacting physical and mental states, and vice versa” (10). Poor breathing patterns related to stress and “poor performance...especially in activities such as music and sport” (Wilson and Cummings, 168) can be regulated through developing mindful breathing methods towards a more relaxed breathing response to stress. For example, Gard et al., assert, “In yoga practice, holding the breath after inhalation or exhalation is proposed to enhance parasympathetic activity...yoga practices, including breathing, train the ANS [autonomic nervous system] to be more dynamically adaptive to stressors” (10). Good breathing habits can aid in “regeneration and relaxation, increased performance, reduced panic/anxiety, depression relapse” (175).

7.4.2.2 Embodiment

Bottom up self-regulation also encompasses the idea of embodiment, which, according to Gard, et al., “implicitly refers to action coupled with and not separate from the bodily experience.... With embodiment, we propose sensory and perceptual faculties are sharpened—a sense of clarity or greater phenomenal intensity in which sensation is experienced emerges” (9). This description suggests a possible connection and mutual support between theories on embodiment and embodied cognition (mind-body-tool) which both conceive the environment and sensory system as important in neurovisceral experience.

7.4.2.2.1 Yoga

One embodiment-related bottom-up LSR strategy, according to Gard, et al., is yoga.

[B]ody movement during yoga practice and activation of motor and inhibitory control circuits like the striatopallidal–thalamocortical loops in the context of physical arousal may be a more effective way of triggering exposure, extinction, and adaptive reconsolidation of emotions [in some individuals]. With embodiment, we propose sensory and perceptual faculties are sharpened—a sense of clarity or greater phenomenal intensity in which sensation is experienced emerge. (9)

Yoga, as with other embodiment-centered approaches connected to LSR, includes *early attentional filtering*, which refers to a type of “primary sensory processing of the environment” (Gard, et al., 9). Embodiment-centered approaches, such as yoga, can be effective in “reducing prolonged emotional reactivity and associated autonomic responses [perceptual biases] (9). Reactivity to perceptual biases is thus modified contributing towards more “adaptive motor output” (9). Through embodiment-centered approaches like yoga individuals can develop what has been termed a *relaxation response*, meaning skillfully keeping arousal at lower levels through remaining calm with less effort while under stress, and in recovering quicker from stress (10). This involves *parasympathetic control*, which Gard et al., describe as:

[a] form of autonomic nervous system regulation in part by physiologically reducing prolonged emotional reactivity and associated autonomic responses....by shifting a physiological set point for baseline reactivity over repeated, long-term yoga practice. (10)

7.4.2.2.2 Progressive Relaxation

Relaxation response is underpinned by the idea, described by Wilson and Cummings, that “a reduction in muscle tension would also reduce sympathetic nervous system activity through centrally mediated feedback systems” (176). The original theory, termed *progressive relaxation*, is described by Wilson and Cummings thus:

Progressive relaxation exercises begin by systematically tensing and relaxing major muscle groups and becoming aware of the differences between the two states.... The ultimate goal of PMR [progressive muscle relaxation] is to automatically and

instantaneously monitor and release all unnecessary muscle tension in the body without having first to contract the muscles. (176)

Obviously, such skill can aid performing artists such as musicians and dancers who rely on fine motor skills for their creative process while negotiating the stress that may occur in front of an audience. *Autogenic therapy* is another skill connected with mindfulness that can aid in neutralizing the effects of negative feedback. The underpinning idea here is that the body knows best how to regulate itself. Thus, by replacing negative self-talk with positive talk, the body will respond accordingly (a form of self-hypnosis). In fact, in some studies, autogenic therapy has been found to be more effective in muscle relaxation than PMR techniques (Wilson and Cummings, 183-4). Bottom up LRS skills (described in this chapter) are summarized in Table 5 below:

Table 5. Bottom up LSR skills and strategies

Bottom up LSR Skills and Strategies	
Embodiment-Centered (e.g., yoga)	<ul style="list-style-type: none"> • Sensory and perceptual faculties are sharpened • Exposure extinction: adaptive reconsolidation of emotions
Early attention filtering (e.g., yoga)	<ul style="list-style-type: none"> • Control of primary sensory processing of the environment • Adaptive motor output
Relaxation response (e.g., yoga)	<ul style="list-style-type: none"> • A new base (parasympathetic control) line that reduces perceptual biases that prolong emotional reactivity and associated autonomic responses
Progressive Muscle Relaxation (PMR)	<ul style="list-style-type: none"> • Automatically and instantaneously monitor and release all unnecessary muscle tension in the body without having first to contract the muscles
Autogenic Therapy	<ul style="list-style-type: none"> • Positive self-talk helps body’s natural self-regulatory systems adjustment more fully
Self-Compassion: Exercise and eating healthy (*Integrated LSR)	<ul style="list-style-type: none"> • Increased self-compassion: focus on intrinsic benefit rather than ego related goals (extrinsic); improved mindfulness of actions; improved ability to self-regulate after relapse

7.4.3 Integrated LSR

On the whole, then, bottom up self-regulation strategies and skills are beneficial in the regulation of “emotional reactions [which] can be triggered by preattentive or automatic processes” (Eysenck and Keane 2005, 28). Conversely, top down self-regulation can aid in management of the slower-acting cognitive system that plays a critical role in the degree to which emotional information is consciously attended. Therefore, as emotion often involves both cognitive (attention) and sub conscious systems, the integration of top down and bottom up skills and strategies is key to emotional regulation (Gard, et al. 2014). Additionally, this integrated approach is important to motivation, as both “physiological arousal” and “cognitive” processing

of emotion “signify how a situation relates to our important goals” and impact goal management (Wilson and Cummings, 131).

Gard, et al., describe this integration as:

bidirectional feedback between executive, viscerosomatic, and homeostatic processes.... integration is believed to dampen the release of neurochemical mediators (i.e. “stress hormones”) across brain and bodily systems in an adaptive controlled process that extinguishes the prolonged sympathetic arousal and associated cognitive and emotional dysregulation that is habitually conditioned as a response. (11)

It has been shown that through the ongoing practice of top down and bottom up skills and strategies that integration takes place between “inhibitory control mechanisms” and “autonomic, attentional, and affective systems, creating a functional and structural network for self-regulation” (11). This integration involves what is termed *extinction learning*, the re-condition[ing of] the interactions across bodily systems during physical and/or emotional stress” via LRS strategies which “re-orient cognitive, emotional, behavioral, and physiological output toward adaptive trajectories” (Gard, et al., 11).

7.4.3.1 Self-compassion

Self-compassion, perhaps the most basic and naturally reflective practice of integrated LSR, can involve managing health related behaviour. Exercise and healthy eating, when seen as regulated behaviours connected to intrinsic goals such as being healthy, help attenuate extrinsic goals connected to ego (Terry and Leary 2011, 354). Extrinsic ego-driven choices related to health have been shown to contribute to other maladaptive behavior (356). Individuals with self-compassion are shown to have a greater sense of responsibility for their actions than do

individuals lacking in self-compassion (355-6). In addition, after lapses, self-compassionate individuals find it easier to reorient towards adaptive behaviour (356).

7.5 FLOW

Another state of mind, related to self-regulation, creativity and wellbeing is *flow*, also referred to as *zone*. According to Csikszentmihaly (1991) flow refers to:

[a] state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will keep doing it even at great cost, for the sheer sake of doing it. (22)

This is an experience related to mindfulness in that concern for self evaporates. However, the flow state is a result of sustained and *focused attention* (Vorhauser-Smith, 8) (which differs from the open or receptive awareness and attention of mindfulness). The benefit here is that individuals are less likely to be distracted while in this state:

The longer we are able to focus our concentration through practice and study, the better and more efficient the brain begins to perform as a result of structural refinement of neural pathways and networks associated with that area of specialization. (7)

That is, the sustained and focused attention that facilitates flow can physically alter the brain.

This biologically altering process aids expert brains that are “able to remain ‘cool’ and focused despite pressure or distraction and rely on emotional cues for decision-making but regain prefrontal focus before taking action” (7). Flow also implies self-acceptance and a willingness and openness to new experiences, with the important result of allowing the evaporation of the sense of self. As Limb and Braun (2008) point out, “conscious self-monitoring can inhibit spontaneity and impair performance” (4).

Flow/Zone are representative of a state of *optimal arousal* for creativity, one that combines a “low state of stress and high performance” (Vorhauser-Smith, 8). “Optimal performance occurs

when a calm and focused state of mind is achieved. This relaxed mindset can also range across the spectrum, from inertia, apathy or procrastination through to extreme states of immersion and attunement” (8). That is, this combination of calm and focus are critical to the creative process, but the degree and quality of the two must be balanced. This supports Dietrich’s assertion that attention, openness and a restful brain state are required for all four psychological processes to be active in creative thinking (deliberate cognitive, deliberate emotional, spontaneous cognitive, spontaneous emotional; see Chapter 3) (2004). While LSR skills and strategies are consciously developed and managed as aspects of mindfulness, flow is not conceived this way. Rather, it is a state resulting from what Csikszentmihalyi summarizes in eight essentials:

1. The activity is challenging and requires skills (112).
2. One is able to concentrate on the task at hand (126).
3. The activity has clear goals (120).
4. The activity matches challenges to skills and provides clear and immediate feedback (142).
5. One experiences deep but effortless involvement (111).
6. One has a sense of control (130).
7. Concern for the self disappears (134).
8. Sense of time duration is altered (142).

Other research discussed in this paper supports Csikszentmihalyi’s eight conditions as important not only for flow to occur but for other systems of SCWB to be optimized. For example, having clear goals and challenges that do not exceed perceived skills supports motivational intensity and persistence. Attention and focus, as we have just seen, is critical to self-regulation and to motivation. A sense of control reflects the self-actualization underpinned by critical agency. The evaporation of a sense of self is useful to attenuate the brain’s self-monitoring system and therefore helpful to creative risk taking. Finally, the temporal effect of flow allows creators to focus on the creative process instead of the hands on the clock, tick by tick; “freedom from the

tyranny of time adds to the feeling of exhilaration we get during a state of complete involvement” (Csikszentmihalyi, 142). Similarly, Slack and Wise referred to the hegemony of the 24/7 clock as detrimental to individual and group wellbeing because it disembods individuals and groups from lived time, and time experienced, a relationship to time that is necessary for knowledge transmission in cultures and that changes from culture to culture depending on self-endorsed needs (see Chapter 5). Csikszentmihalyi’s essential aspects in flow are therefore important to positive valence, goal management, intrinsic motivation, and the related time, perseverance and commitment it takes to acquire proficiency and mastery within a domain.

Flow can be conceived at some level as being facilitated through LSR techniques. Conversely, it also contributes to self-regulation. This is important in that it underscores the necessity for both flow and LSR in SCWB.

7.6 IMPROVISATION: LSR AND FLOW

The type of openness and risk-taking behaviour involved in improvisation requires attenuation of the self-monitoring system. Both LSR and flow facilitate a diminution of the self-monitoring system. Attenuation in the dorsolateral “pre-frontal cortex...enables the musician to be not easily distracted into digressive or critical thought and action” and facilitates flow, creative risk taking, and subconscious parallel cognitive processing. The attenuation of cognitive processes including “goal-directed behaviors [that] are consciously monitored, evaluated and corrected, [as well] as self-monitoring [and] focused attention” (Limb and Braun 2008, 4) is beneficial to improvisation. The “deactivation [of specific areas of cognition] may be associated with defocused free-floating attention, that permits spontaneous unplanned associations, and sudden insights or realizations” (4). It also facilitates being subconsciously able to “run several programs

in the brain’s basal ganglia concurrently,” meaning that we can *subconsciously* “multi-task” (Vorhauser-Smith 2011, 12). Unlike the hippocampus, which is related to declarative memory and limited to two or three tasks, the basil ganglia is associated with non-declarative and less flexible memory (12) and can handle more tasks. Further, attenuation of the amygdala and hippocampus while improvising reduces the stress and anxiety that may otherwise be present in a given context.

Table 6. Strategies and processes associated with flow, risk-taking and improvisation

LSR Strategies	Cognitive/Affective Processes	Outcomes
<ul style="list-style-type: none"> • Mindfulness • Meditation • Imagery • Attention regulation • Desensitization • Exposure extinction • Early attention filtering • Autogenic Therapy • Breath regulation • Compassion (self and others) 	Attenuation of self-monitoring system	<ul style="list-style-type: none"> • Reduced public self-consciousness, less self-aware
	Deactivation of amygdala and hippocampus	<ul style="list-style-type: none"> • Reduced fear, anxiety, distractions, and stress • Relaxed awareness, • Increased openness (learning and reshaping existing knowledge) • Increased risk-taking • Lowered self-critique, analysis and judgment • Increased subconscious parallel cognitive processing and production (may lead to spontaneous associations and insights) • Heightened presence and awareness
	Activation of pre-frontal cortex	<ul style="list-style-type: none"> • Unfiltered expression of authentic creative voice (unmonitored self-narrative)
	Activation of frontal polar cortex	<ul style="list-style-type: none"> • Allows for higher cognitive functions such as creative production, directing and managing multiple cognitive functions towards higher cognitive intentions

7.7 IMPLICATIONS

In concert with the systems discussed in previous chapters, the need for the self-regulation system and for LSR skills and strategies to manage individuals' responses to socio-environmental stressors becomes even clearer. In the neoliberal climate in which this paper is situated, it is important to note that SCWB considerations are facilitated directly by LSR (see Appendix D) but are undermined by the negative socio-environmental stressors of neoliberalism.

Specifically, the suggestion that resiliency is a desirable creative behaviour should be reexamined. Resiliency generally refers to “an ability to recover from or adjust easily to misfortune or change” (Merriam-Webster n.d.). This puts the responsibility on the impacted individual/group to self-adjust to a given set of constraints. This ability to recover from setbacks is necessary for life and creativity; however, it does not address the need for critical agency towards affecting change in the environment itself. It may be better, when addressing resiliency, to pair it with pro social behaviours that foster social support, mastery, and critical agency for this purpose. Lessons can be learned from examining, and participating in the pro-social contexts of arts domains in which collaborative creativity depends on these pro social resources.

Additionally, while integrated LSR does provide space for pro social skills, again more emphasis needs to be put on critical agency as a key factor in wellbeing (see Introduction). Resiliency is reactive, rather than pro-socially active, and the safe, supportive and culture-based societal and natural environment occurring in the SCWB systems model is essential to creativity. Finally, resiliency differs from positive reappraisal in that the latter allows for a reframing of negative emotional feedback, rather than just a “bouncing back.” In these ways, LSR in combination with critical agency facilitates the proactive management of psychophysiological stressors, helping to

avoid the exhausting repetition of more passively resilient reactions that may result in an unhealthy self-preoccupation. In doing so, the use of LSR and critical agency can support an aim of aesthetic learning and SCWB, which foster and require a balance between inner life and outer world (Austring and Sørensen 2010).

Living in a neoliberal society can result in common forms of distress such as external mediating of the self, incongruence between implicit and explicit motives, social anxiety, depression, and fear. However, eustress, a positive motivational dysregulation related to extrinsic rewards can also undermine the intrinsic motivated creative processes. LSR helps to moderate forms of negative feedback that result in maladaptive feelings, thoughts, and behaviour. This is essential in ensuring the intrinsic values of creative process are safeguarded and are able to contribute to SCWB.

LSR can also assist in freeing individuals with type A personality from clinging to their personalities because it emphasizes the impermanency of all things, including the self, and the need for being open to change and inviting self-transcendent challenges that facilitate meaningful growth and wellbeing. Impermanency is implicit in the conception of a creative life in which one's knowledge is reshaped by each new experience as a lifelong learning process. This is an important idea, given the current neoliberal emphasis on the self as utilitarian—a means to an end—with success measured in mere metrics, rendering the self static. This utilitarian approach negates a focus on ongoing learning towards full scope capacity, meaningful growth, and self-transcendence. Creative domains facilitate ways in which individuals can bring their past to a new experience, to be reshaped, a reminder that we are fluid and dynamic beings.

LSR can aid in managing negative feedback in ways other than through chronic reflexivity. Individuals can find peace from constant external mediation of the self by fostering the ability to be free of identity, let go, and rest in awareness. This directly helps areas of the creative process, such as flow, risk taking, and improvising, where attenuation of a public sense of self is crucial. Non-identification can also free individuals from status processes and the hegemony of the 24/7 clock, which not only confines the mind to immediate concerns but fuels a restless mind. “[A]ttention-getting technologies...[that] exploit [individual’s] attention orientation response,” in today’s environment can result in attention blindness, which impairs the “ability to notice novelty” (Crawford, 14). These temporal constraints impede creative thinking processes that depend on being present, having a calm mental state, and experiencing time according to cultural representations and practices. However, practices such as meditation can aid in calming the mind and focusing and sustaining attention. The application of meditation to the creative process also aids in the development of an internal knowledge base that requires long hours of focused deliberate practice. In addition, imagery can also aid in the forming of an internal knowledge base through sensory augmentation, and engagement of the brain’s mirror systems, resulting in an increasing of distribution of knowledge across the brain.

Fostering social support resources, mastery, and compassion skills aid in contributing to the creation of a safe and supportive social climate needed for creative risk taking, openness to new experiences and challenges, and improvisation. These skills are extremely valuable in a society where neurotic traits such as competition, self- and other-criticism, judgment, and self- and other-commodification are the norm and may result in maladaptive feelings, thoughts and behaviours that are incongruent with mindfulness and other indicators of SCWB. Additionally, a

pro social environment can assist with access to creative participation for some individuals. For example, desensitization can be employed to introduce high reactive people slowly to riskier or more public environments for creativity in a way that does not invite unwanted stress. This would increase motivation to participate in the creative process, and ultimately enhance self-esteem, meaningful growth and SCWB.

In Chapter 3 (Creativity) it was revealed that SCWB requires holistic cognition, and Chapter 4 (Self-system) added that embodiment plays an important role in perception and knowledge acquisition. With reference to self-regulation, LSR theory supports the idea that thoughts and behaviours are entangled with the bodily experience. For example, active real-world creative participation facilitates and fosters a more holistic cognition, which ultimately contributes to wellbeing. LSR can help to sharpen sensory and perceptual faculties and contribute to fostering a relaxation response, which facilitates the adaptive thoughts and behaviour needed in creative processes, such as being able to improvise in real time and changing circumstances.

Finally, and importantly, the intrinsically motivated creative process itself can be viewed as an LSR strategy, a facilitator of self-regulation and wellbeing. That is, in participating in the creative process, we can apply the self-mending aspects of aesthetic learning and heuristic research; the calm mental state involved in flow and creative thinking; the attenuation of public-self-perception used in risk taking, improvising, and performance; agency, identity, and coherence through cultural frameworks; pro social behaviour; holistic cognition; real world engagement; meaningful growth through CPS and sharing; and skillful tool use that contributes to perception and to self-esteem. In doing so, we build skills and strategies for overall wellbeing.

8. APPLICATION OF THE SCWB MODEL

A hypothetical situation can provide a context for examining the ways in which the interdependent subsystems and dimensions in the suprasystem could interact with regards to SCWB. In this case, the model will be applied to a hypothetical post-secondary performing arts program. Let us assume that the program has experienced gradual changes over the past ten years as follows: a reduction in full-time staff, an increase in contract staff, a reduction of advanced practical and theoretical courses, an increase in entrepreneurial/business courses, an increase in commercial art forms, a reduction in non-commercial art forms, an increase in technology-based curricula, a reduction in culture-based content, an increase in online/blended and “canned” (3rd party-authored/pre-packaged) courses/content and a reduction in hands-on, real-time/space courses. In short, it has many typical features of public college and university performing arts programs in Canada.

I have chosen to use an arts education program as an illustration because it is where my experience and expertise lies. I am a jazz musician who has taught and/or studied at four Ontario post-secondary institutions (both colleges and universities) and who is in constant contact with colleagues and students in other institutions. The set of assumptions in the previous paragraph is based on my observation of changes in post-secondary music programs over the past two decades. This is not to say that all arts programs are identical to those I have experienced. Still, regardless of individual institutional differences, the environmental and mediating forces acting on this domain and its participants remain similar. Similarly, it is important to remember that the Self in SCWB can represent individuals, groups, or domains. One could just as easily apply indicators and conditions to a single life, a culture, an art form, or a workplace. Since the

contingent assemblage of creativity-politics-economics-technology is a pervasive and global force, the changes listed above (precarious employment, utilitarian bias, entrepreneurial bias, commercialism, the prescribed use of technology, the reduction in culture-based knowledge, and diminished first-person experiences, and so on) have been occurring across domains in a variety of ways. In other words, one should be able to apply the indicators and conditions for SCWB to any Self. Ideally, a next step in this work is the development of qualitative and quantitative research tools in order to collect data about individual, domain and institutional experiences of SCWB.

While the assumptions made in the illustration are based on observation and experience, the application of the conditions and indicators of SCWB are based on the present model and research. The different levels at which the SCWB model is applied to the example are based on the data in Appendix B (The Creative Economy and Educational Policy, see especially A2.2). The goal is to illustrate that, based on a set of given forces, policies and actions, the model and the research on which it is based can identify and predict areas of dysregulation in the system that negatively impact creative wellbeing.

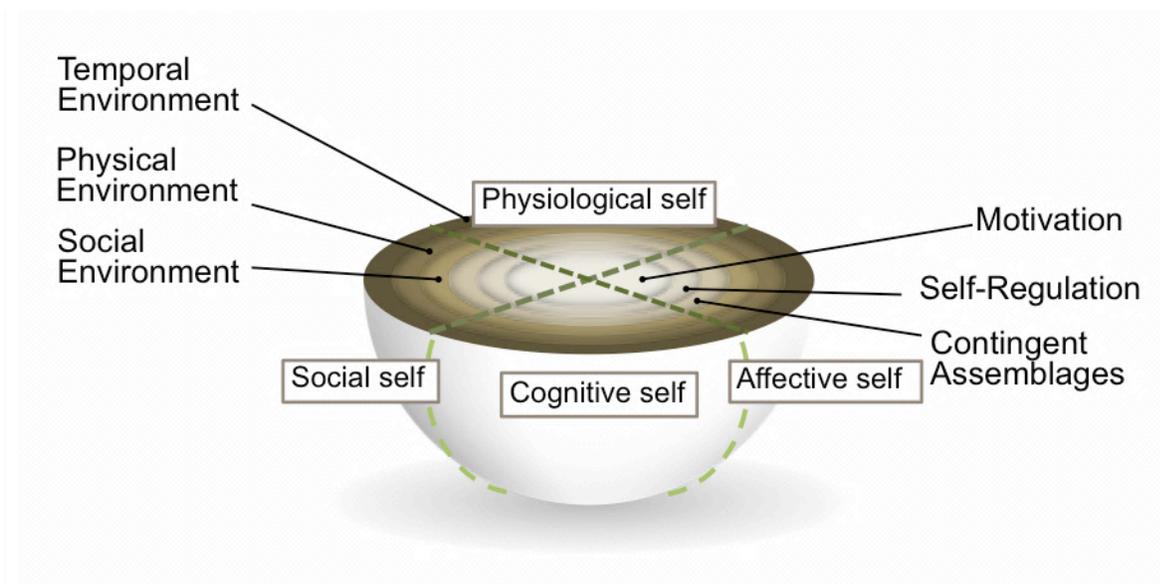
8.1 SITUATING THE PROGRAM IN THE SCWB MODEL

Our hypothetical performing arts program is situated within the temporal, physical and social environment systems in the same way that any person, culture, or creative domain is positioned within those systems (see Fig. 7). That is, the program's cultural representations, practices and experiences related to time as experienced in the environment are accounted for in the temporal system, those related to the architecture of the environment are accounted for in the physical

system, and those related to the negotiation and management of social relationships and identities are located in the social environment.

The contingent assemblages subsystem accounts for the phenomenon of established and maintained articulations of external constraints on agency and participation in the program culture. It is also, therefore, a mediating subsystem between and among the self-system and the other subsystems. The motivation system accounts for goal-related feelings, thoughts and behaviours of individuals and groups within the arts program suprasystem, and is also a mediating subsystem between and among subsystems and the self-system. The self-regulation subsystem acts as a “wellbeing barometer” that seeks psychophysiological homeostasis and that also mediates between and among other subsystems and the self-system. In the arts program example, the “self” will refer to the program culture at times and to the individuals within that culture at other times. The dimensions of the self are permeable and interconnect with, and thus can be influenced by, all environmental and intermediary systems. Therefore, once situated in the systems model, the arts program and its group members are all continuously subjected to internal and external influencers.

Figure 7. Systems Model of SCWB – Suprasystem (repetition of Figure 1)



According to the systems model, the homeostasis/balance between components shown in Fig. 7 is essential in indicating SCWB in the domain/culture of the program. Effects on SCWB indicators arising from forces in various subsystems will be used to reveal the functionality of subsystems and of the system as a whole. It will also allow for the identification of any threats or biases (based on the research) that can dysregulate the system or subsystems.

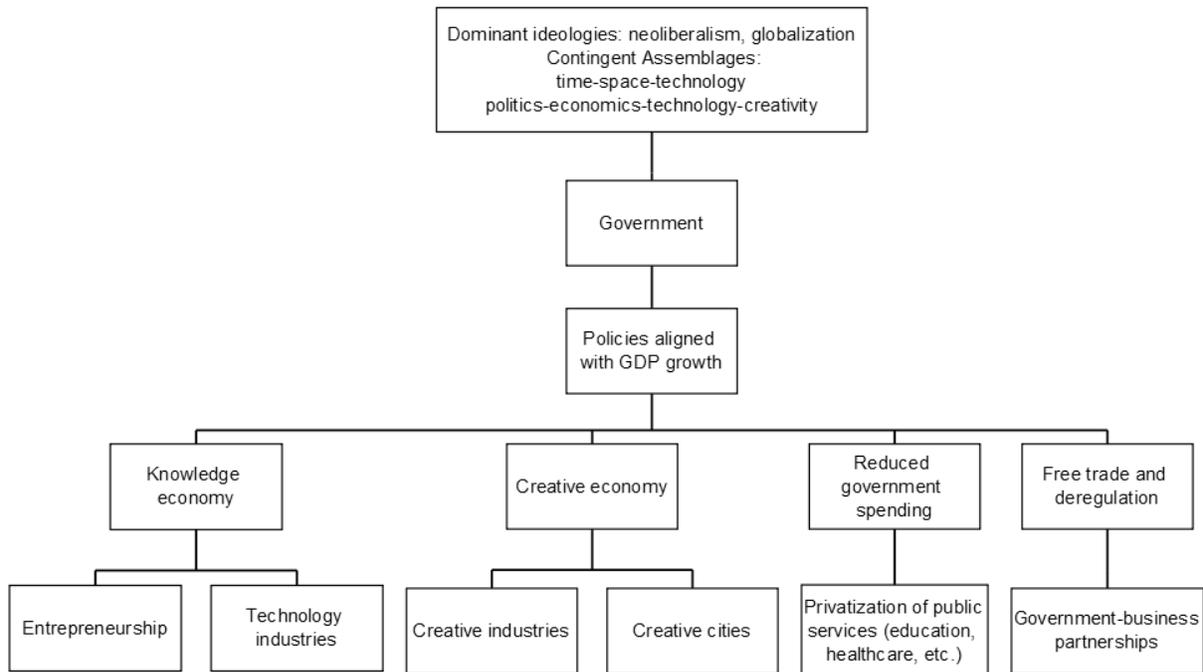
In order to arrive at the environmental forces that impact the program culture and its participants, one must consider institutional administrative forces. However, these cannot exist independently of governmental and global forces that determine the mandates of public educational institutions. Therefore, the application of the model will begin at the governmental level, assuming the current global forces associated with neoliberalism and globalization, and showing resultant governmental policies and actions (Figure 8). Next, the model will be applied to the institutional administrative level, assuming the governmental forces discussed earlier and considering their impact on broad institutional education policies and actions (Figs 9-15). Finally, the model will

be applied to the arts program teaching and learning level, where those same institutional education forces impact educational/creative design, delivery, action and experience (Figs 16 - 22). A discussion of the implications for SCWB follows each diagram. While the forces and their branching consequences in the example are extensive, they are not intended to be exhaustive.

8.2 GOVERNMENTAL LEVEL

Fig. 8 illustrates a set of external forces (in this case, the global neoliberal maintained assemblage of reduced government, free trade and deregulation, and economic fundamentalism) that give rise to economic and workforce policies aligned with GDP growth (knowledge economy, creative economy, reduced government spending, and government-corporate partnerships).

Figure 7. Government Level



From a governmental perspective, there is a prioritization of knowledge economy and creative economy over other sectors of the economy that are seen as struggling, such as manufacturing and service industries. Thus entrepreneurship, technology industries, creative industries and creative cities are given priority in order to generate wealth (GDP contribution). This involves attracting entrepreneurial talent from home and around the world (to creative clusters and creative cities across the country) and increased global competitiveness. This may entail implementing policies emphasizing cultural boosterism and the industrial commodification of cultural products. For example, the Aboriginal Tourist Association of Canada (ATAC) “focuses on creating partnerships between associations, organizations, government departments and industry leaders from across Canada to support the growth of Aboriginal tourism in Canada” (O’Neill Marketing and Consulting 2015, ii). ATAC supports, for example, the commodification of aboriginal music, dance and other cultural activities for tourists. Although this may serve certain interests of the government and of aboriginal communities, who intend to improve the wellbeing of local cultures and the national and local economies, it may result in cultural marginalization, assimilation, exploitation, and fossilization.

Adopting the primacy of the GDP as a means to welfare results in funneling of decision-making processes through the narrow lens of the marketplace when faced with finding solution to social problems: if we just show people how to make money, their lives will be better. It has been shown that creative city initiatives result in gentrification, privileging some members of the populations over others while marginalizing others. In addition, these initiatives have repeatedly resulted in increased economic inequality (see Introduction, Appendixes B and C). Further, local cultures or creative domains that do not assimilate via the commodification of their practices

stand to be marginalized in such a system, thereby weakening the heterogeneity and dynamism of the entire cultural fabric.

Reduced spending includes a reduction of public operating grants. Therefore, governments are compelling provinces, municipalities, and public institutions to transform their traditional economies in order to improve the capacity to “create, adopt, and commercialize knowledge” and contribute to the GDP (Industry Canada 2001, 30). In other words, public goods and services are forced increasingly to privatize. In terms of post-secondary education, this results in schools having to generate more income on their own, via, for example, tuition hikes, business sector partnerships, and commodification of knowledge. As an incentive, governments financially reward institutions and businesses that successfully partner together through “long-term government commitment to their knowledge infrastructure” (73). However, these outcomes may marginalize institutions whose intrinsic needs and goals differ from those in policy recommendations.

Governments naturalize neoliberal globalization (see Appendixes A and B) and create a sense of urgency about the need to prepare for a global economy in order to compete for international investment, talent, and economic growth on the global stage. This entails policies focusing on gains and attractiveness in the global economy, including appearing attractive to the international Creative Class in hopes they migrate to creative cities in Canada. This involves social engineering, capitalizing on the cognitive biases shaped by neoliberal discourse, and then shaping a set of educational demands and policies that create “global citizens” who can contribute value and “human capital” to the new knowledge and creative economies. However, this may marginalize values outside those associated with knowledge and creative economies,

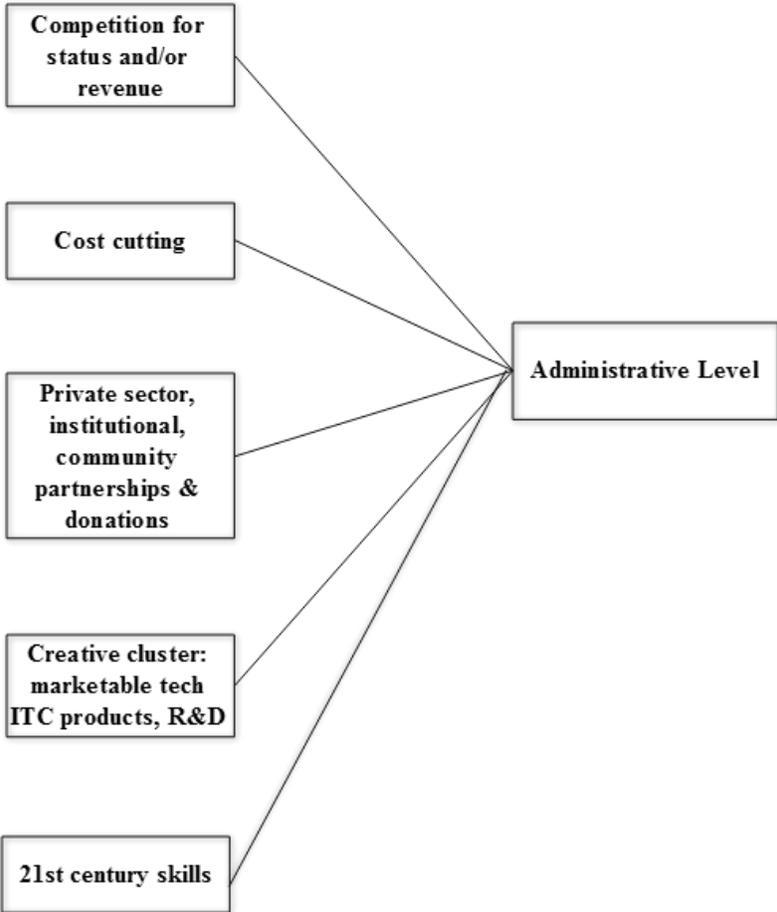
thereby limiting the potential full-scope capability of a nation, its provinces, cities, institutions, and people. Finally, the sense of urgency fueling these decisions has created a time orientation bias, intensifying present time orientation, which may reduce the ability to use the past, e.g., history, and tradition, to inform the present. In addition, this time orientation is known to contribute to maladaptive emotions and behaviours associated with extrinsic rewards, such as anxiety, self-criticism and seeking (see Chapter 4).

The broad policies resulting from governmental social engineering permeate the institutional administrative culture (Appendix E), becoming forces involved in its social/temporal/physical environment, motivation, and self-regulation subsystems. Additionally, the contingent assemblages that are definitive of a neoliberal globalized agenda (time-space-technology, and economics-politics-technology-creativity) continue to be forces at the institutional administrative level.

8.3 INSTITUTIONAL ADMINISTRATIVE LEVEL

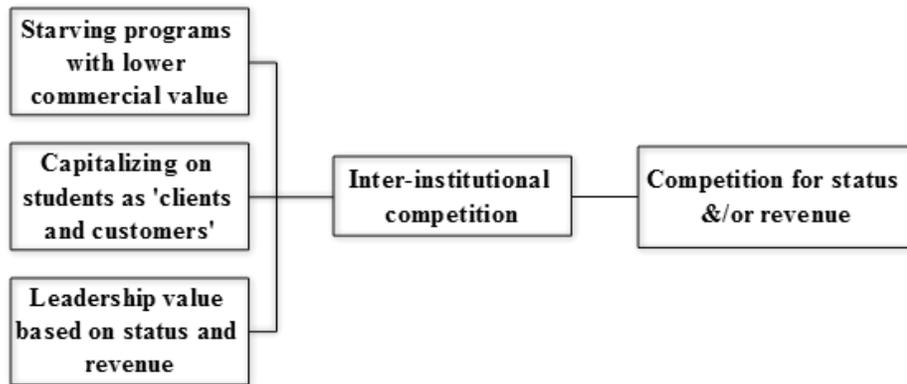
The complete flow-chart for the institutional administrative level can be seen in Appendix E. Below, the main policy tier and each of its "effect branches" are shown and discussed in turn. Five general policies implemented by institutional administrations are shown as Tier 1 in Figure 9: competition for status and/or revenue; cost cutting; external partnerships; shaping creative learning towards creative and knowledge economies; and providing learners with 21st century skills for the same economies (see Introduction and Appendix B).

Figure 8. Institutional Administrative Level, Tier 1



These policies create specific stressors on systems and components of the SCWB model. Each of these general branches of administrative focus has further related policy and action outcomes, such as those shown in Figures 10-14:

Figure 9. Institutional Administrative Level, Tier 1, Branch 1: Competition for status/revenue



1. Competition for status/and or revenue (Figure 10)

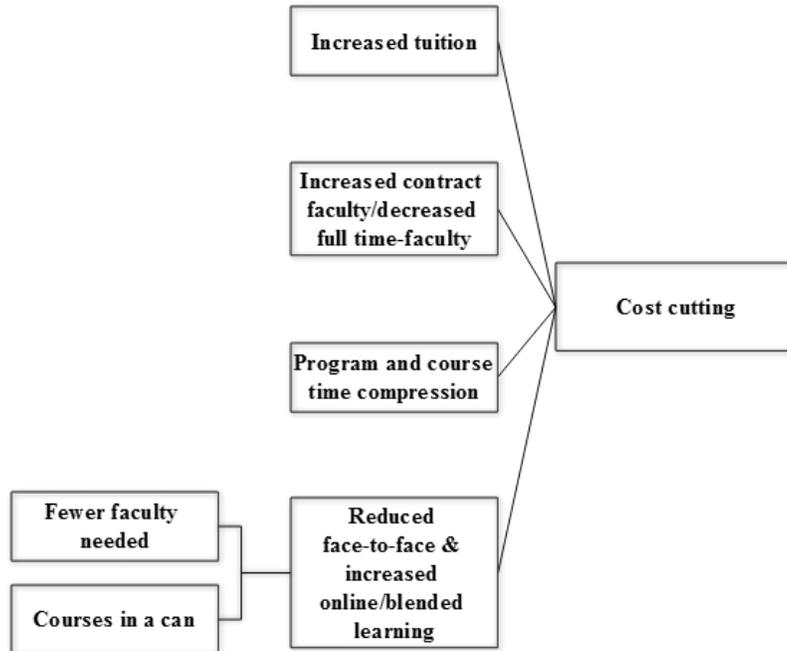
Competition for status and/or revenue plays out institutionally as inter- and intra-institutional competition for funding, partnerships, and students (who are referred to as “funding units” and may be considered to be potential status units). This encourages institutions and programs to adopt blanket models/and or strategies advertised to contribute to economic and/or status success (see Appendix B). Marketing to and enrolling students motivated by the same rewards advertised in such models generates income and/or status for the institution. However, following through “as advertised” from these models/strategies involves external administrative control, surveillance, and restriction of choice in and by programs.

- a. Revenue or status generated by adopting a given model or set of strategies increases the status of a program in the eye of the institution. This may marginalize programs that do contribute as much under the prescribed format. In other words, the metrically based judging and ranking of programs marginalizes those programs, regardless of academic quality, contributions to creative

wellbeing or other human centered benefits, that do not contribute as much to the financial or status aims of the institution.

- b. The need for environmental mastery (i.e., the social space and time needed to facilitate cultural/creative domain practices within a program) is supplanted by the need to reify social space/time, practices, and related experiential objectives and outcomes in order to align with institutional, extrinsically oriented motivation towards performance- and engagement-contingent rewards. These controls reveal and foster a present time orientation bias, which devalues programs, such as those in arts domains that require and benefit from traditional knowledge, whereby the past informs the present. More generally, this implies a diminished sense of value for history, tradition, and related representations, practices, and experiences within programs.
- c. Due to the status of students as “clients” in a competitive “marketplace,” institutions are compelled to give significant weight to consumer opinions and demands in order to be able to claim student satisfaction in marketing efforts and to retain “funding units.” This weight extends to domain knowledge and educational issues and decision-making.
- d. Objectives and outcomes of programs aimed at meeting or exceeding economic growth or status goals may be perceived as being of high quality and/or having good administrative leadership, regardless of meeting (or not) other criteria.

Figure 10. Institutional Administrative Level, Tier 1, Branch 2: Cost cutting



2. Cost cutting (fig. 11)

Decreased public funding results in cost-cutting measures, along with revenue-generation measures.

- a. Revenue generation is accomplished in part by significant student tuition and fee hikes, a well-known Canada-wide phenomenon. Increasing the cost of education results in fewer students having access to post-secondary education. This marginalizes those students unable to afford a program and/or unwilling to face significant debt at graduation. It also compels a greater number of students to work, reducing the time they are able to direct to learning.
- b. Costs are reduced by increasing affordable contract faculty while decreasing expensive full-time faculty. Part-time faculty may not have the resources (e.g. time, status, energy, motivation) to contribute as meaningfully toward the sense of

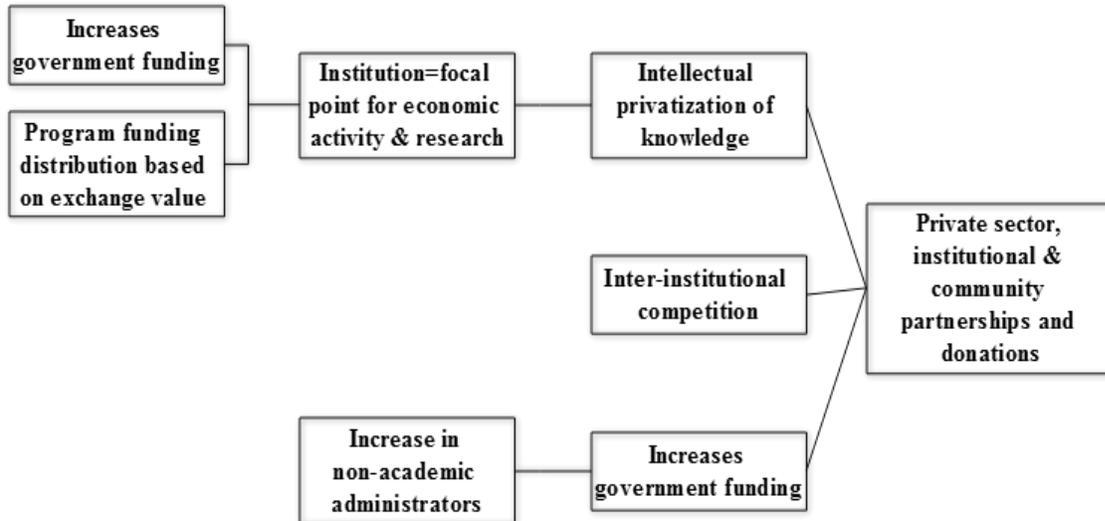
community needed in a learning culture because their time is distributed between various income sources and responsibilities. Also, because of the reduction in full-time hiring, the promise of advancement is significantly diminished, affecting a sense of security and motivation.

- c. Another governmental cost cutting recommendation that goes beyond post-secondary privatization and commodification involves compelling institutions to “examine whether they can compress some four-year degrees into three years by continuing throughout the summer” (Commission on the Reform of Ontario’s Public Services 2012, 256) (see Appendix B). These cost cutting measures benefit market-driven mandates but result in a time-space-technology bias in which an institutional need for speed and efficiency may dilute the traditional social space and time representations, practices, and experiences associated with programs (e.g., disempowering deep learning needs such as slow, deliberate thought). The administration may have to concern itself with whether or not it is “unethical to deliver a course that does not meet the needs of students” (Ashram 2013) and with the impact on student satisfaction and success and on the institution’s role within the community as leaders in human-centered progress. It should be noted that student clients may perceive compressed programs to be desirable from a financial or workload perspective (and thus, marketable), but this does not mean they are educationally effective.
- d. Increasing online and blended learning or offering 3rd-party-developed content or “courses in a can” reduces, on paper, the costly faculty hours needed to develop and deliver courses (Appendix A). However, faculty will have to put many hours

(often, especially for contract faculty, undocumented and unpaid hours) into the learning, maintenance and delivery of online or canned courses they are delivering, including potentially having to make themselves chronically available across a variety of elearning platforms and institutions. Additionally, a reduction in face-to-face time disrupts a sense of community and mutuality between students and faculty. This reduction occurs even though students place a high value on interaction with their teachers and with each other (Liberante 2012, 2). This undermines the mutuality desired in SCWB. Further, it contradicts the value placed on “clients” in commodified education. This begs the questions, "When do students know best?" and "How is that determined?" Are customers "right" only when their opinions align ideologically with the institution? Are their opinions valuable when they voice their own self-determined needs?

- e. Online learning may also diminish the potential for self-determined objectives and outcomes of creative domains in which face-to-face learning is essential to the creative process, especially to acquiring the cultural practices, knowledge, and maintenance of tradition over time. For example, the asynchronous nature of most online learning diminishes the potential for (because it reduces the time and space allotted to) self-determination naturally occurring through, for example, the mentorship relationships and oral transmission of practices, knowledge and traditions in arts programs.

Figure 11. Institutional Administrative Level, Tier 1, Branch 3: Private sector, institutional and community partnerships and donations



3. Private sector, institutional and community partnerships and donations (Figure 12)

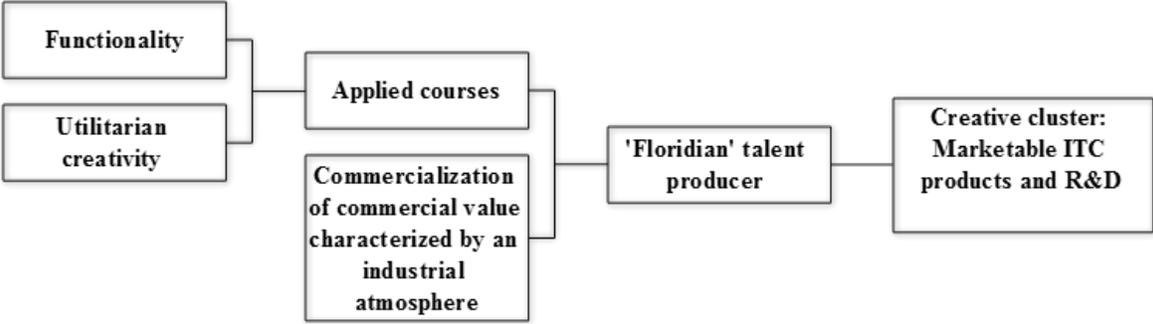
This area of administrative policy increases intellectual privatization (see Introduction and Appendix B), in alignment with the goals of the knowledge economy and creative economy.

- a. Research partnerships increase the chances of additional governmental support. They also benefit the institution by raising the potential to attract talent, attract business sector partnerships, and be competitive in a market driven society (see Introduction and Appendix B).
- b. Reshaping institutional and program learning objectives and outcomes in order to meet partner/market needs (Introduction and Appendix B) becomes necessary. This may result in a prescriptive “legitimizing” and inclusion of certain types of knowledge, along with a devaluing and marginalizing of others. This diminishes

the potential for equal contribution, a sense of belonging and mutuality, academic freedom, and self-determination by programs towards a flourishing democratic culture within the institution and toward SCWB. It also diminishes the potential for many programs to meet their self-determined cultural needs.

- c. Inter-institutional competition for revenue and status sources, including copyright terms applied to knowledge, can reduce the potential for collaboration and information sharing among institutional researchers and students across programs, as well as reducing the breadth and depth of (now privatized) information. This can harm the quality of learning by keeping knowledge out of the hands of students that can be inspiring. At the same time, it disempowers a culture of sharing and collaboration, replacing it with a culture of self-concern, self-reliance, and competition.
- d. These partnerships have resulted in an increased need for non-academic administrators, or for increased workloads for existing administrators, to ensure mandates are met.

Figure 12. Institutional Administrative Level, Tier 1, Branch 4: Creative Cluster; marketable ITC products and research & development

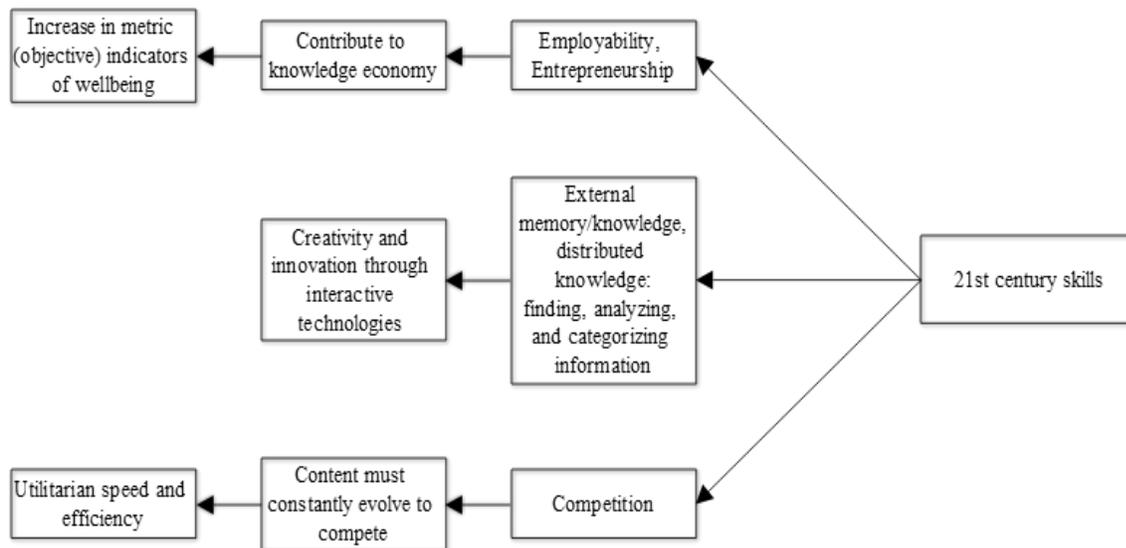


4. Creative Cluster, marketable ITC (information, technology, communication) products and research & development (Figure 13).

The industrial atmosphere surrounding creativity entails giving priority to creative city aims and initiatives, which, on the part of the institution, include fostering utilitarian "Floridian" creative talent (see Introduction and Appendix B). This is because business and governments see schools as the creators of future talent (creative workers), and various companies will utilize this focal point for stimulating innovation.

- a. Knowledge economy and creative economy policies force institutions to adopt a view of creativity as utilitarian, as the predominant discourse around the creativity in policy formation is that "new wealth and all other good economic things flow from it." (Conference Board of Canada 2008, 1-2). This impacts the freedom of programs to self-determine, based on other conceptions of creativity, their educational focus and content, and it increases the proportion of curriculum devoted to commodifying creativity.
- b. Skills associated with this objective can be streamlined in applied courses that foster entrepreneurial skills culture strategy that "aligns with provincial economic goals" (Government of Nova Scotia 2015). Therefore, institutions are compelled to replace classical or liberal education courses with applied ITC versions based on the premise that this is a "common sense" shift based on marketplace values and needs (Bostock 1999, 3).

Figure 13. Institutional Administrative Level, Tier 1, Branch 5: 21st century technology skills



5. 21st century technology skills (Figure 14).

There is prescriptive focus by institutions on providing students with "21st century skills" in order to produce employable, entrepreneurial students who are needed to join or serve the Creative Class (see Introduction and Appendix B) within a market economy (B.C. Premier's Technology Council 2010, 11). The use and teaching of technology plays a central role in these skills.

- a. The success of a program, therefore, may be measured via metric indicators of objective wellbeing, where wellbeing equates to the ability to produce revenue and utilitarian, employable, Floridian creative workers. For example, performing arts programs may be assessed in part in terms of the degree to which these technologies are incorporated into curricula, regardless of their actual efficacy in learning contexts.

- b. The creative process itself will increasingly take place through asynchronous interactive technologies. This may unduly marginalize programs that rely on the development of mind-body-tool cognition and real-time face-to-face learning, especially if they are not perceived as “priority” programs in the knowledge and creative economies. Further, the creative process and SCWB are not facilitated by most externally imposed, sensory-limiting media.
- c. The ability to skim and scan for immediately relevant information using externalized and distributed knowledge is emphasized and is normalized as replacing a need for a deep internal knowledge base. This may marginalize creative domains that rely on internal knowledge bases, or may encourage programs to impose teaching/learning strategies that impede the development of an internal knowledge base, such as that required for artistic composition or improvisation.
- d. There will also be an emphasis on fostering competition, ranking, and judging between students, programs and institutions, measured in terms of useful ideas for the market (metric indicators of subjective wellbeing). This may diminish the status of programs whose value is not monetary or whose culture is more cooperative than competitive, thereby reducing the institutional benefits deriving from use values associated with these programs. Or, it may compel program cultures with traditional aesthetic and cooperative values to disembed from that culture in order to compete for resources or ensure survival.
- e. Success and competitiveness is also measured in terms of responsiveness to market needs, speed and efficiency. At the institutional level, this plays out in constantly

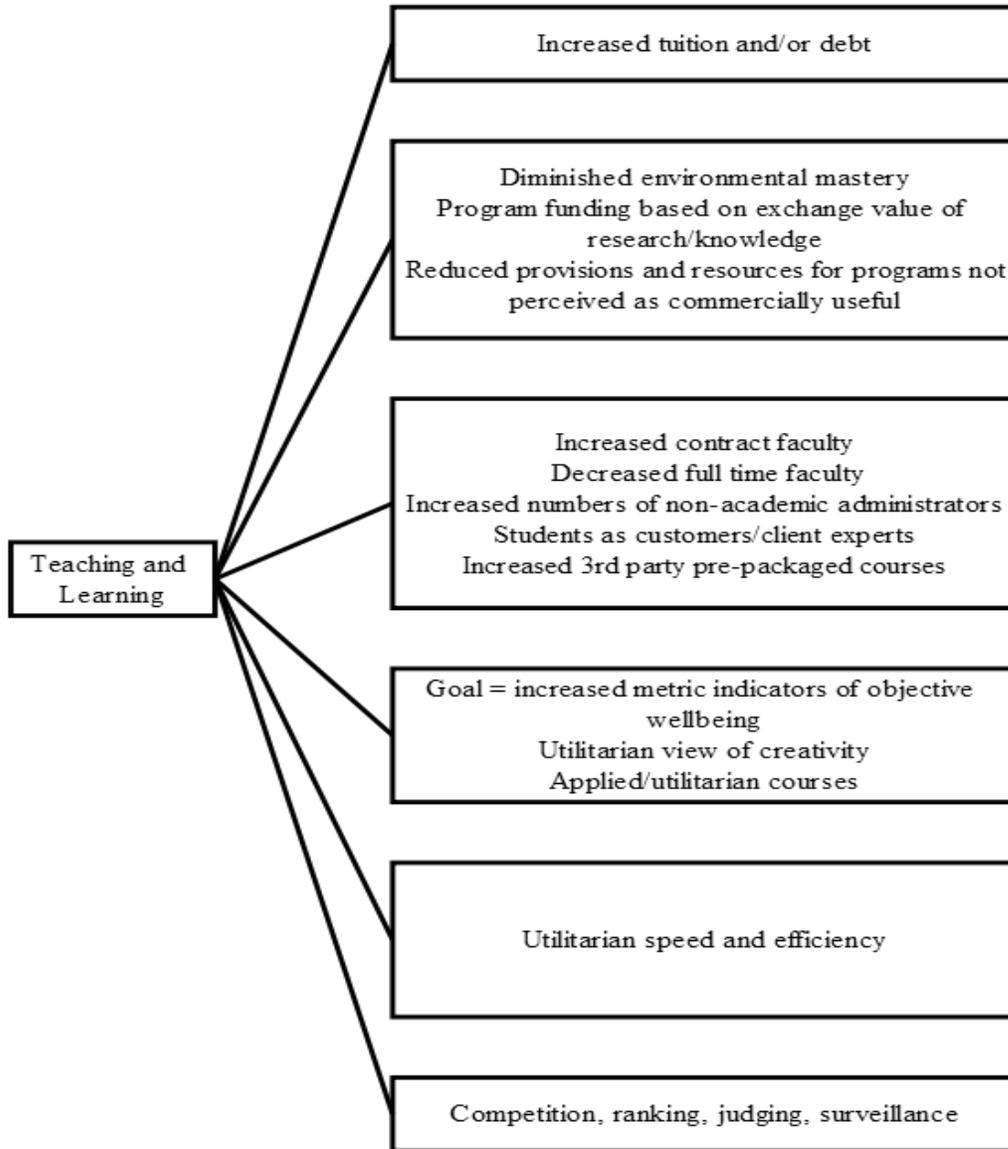
changing emphases, values, and curricula, in course and program compression, and in other temporal constraints.

8.4 TEACHING AND LEARNING LEVEL

The final-tier policies of the institutional administrative level permeate the border of the teaching and learning level's social, temporal and physical environments, becoming first-tier forces that impact program policies, culture and participants (Figure 15). This is the heart of the example, as it is the level at which personal and cultural wellbeing in a performing arts program can finally be seen.

A complete chart of the Teaching and Learning Level appears in Appendix F. The first-tier forces at this level (Figure 15), have been grouped according to logical themes for the teaching and learning level of an arts program culture and in order to apply the concepts discussed in this work as fully as possible. As in previous levels, the first-tier forces reflect assemblages (time-space-technology and economics-politics-technology-creativity) in the service of ideological, governmental, corporate, institutional, and administrative needs (i.e., contributing to the economic competitiveness and objective wellbeing of Canada or the institution in a neoliberal global economy). It is important to remember that these assemblages are a mediating subsystem within the SCWB suprasystem.

Figure 14. Teaching and Learning Level, Tier 1



The indicators of SCWB at the teaching and learning level that are associated with each of the forces in figure 15 follow in figures 16 - 21. Rather than discussing each branch in turn, it will be more useful to show all of the branches visually first, then to organize the discussion by tier. This is because commonalities begin to emerge across branches. In the second tier, we tend to find biases and prescribed values, beliefs and practices dictated by the first-tier. In the third tier,

we find common types of dysregulation in the socio-cultural, motivational, and self-regulatory parts of the model. In the final tier, we see repeated a range of common impacts on the self-system arising from such dysregulation. These impacts will be discussed in terms of the four aspects of the self-system: affective, physiological, cognitive, and social.

Figure 15. Teaching & Learning Level, Branch 1: Increased tuition and/or debt

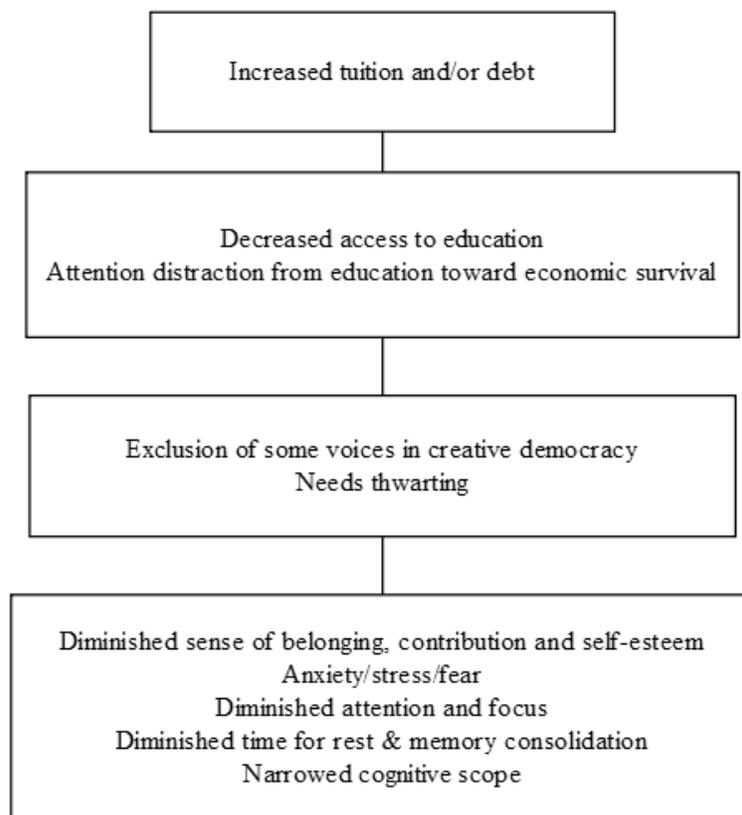


Figure 16. Teaching & Learning Level, Branch 2: Diminished environmental mastery, program funding, reduced provisions and resources

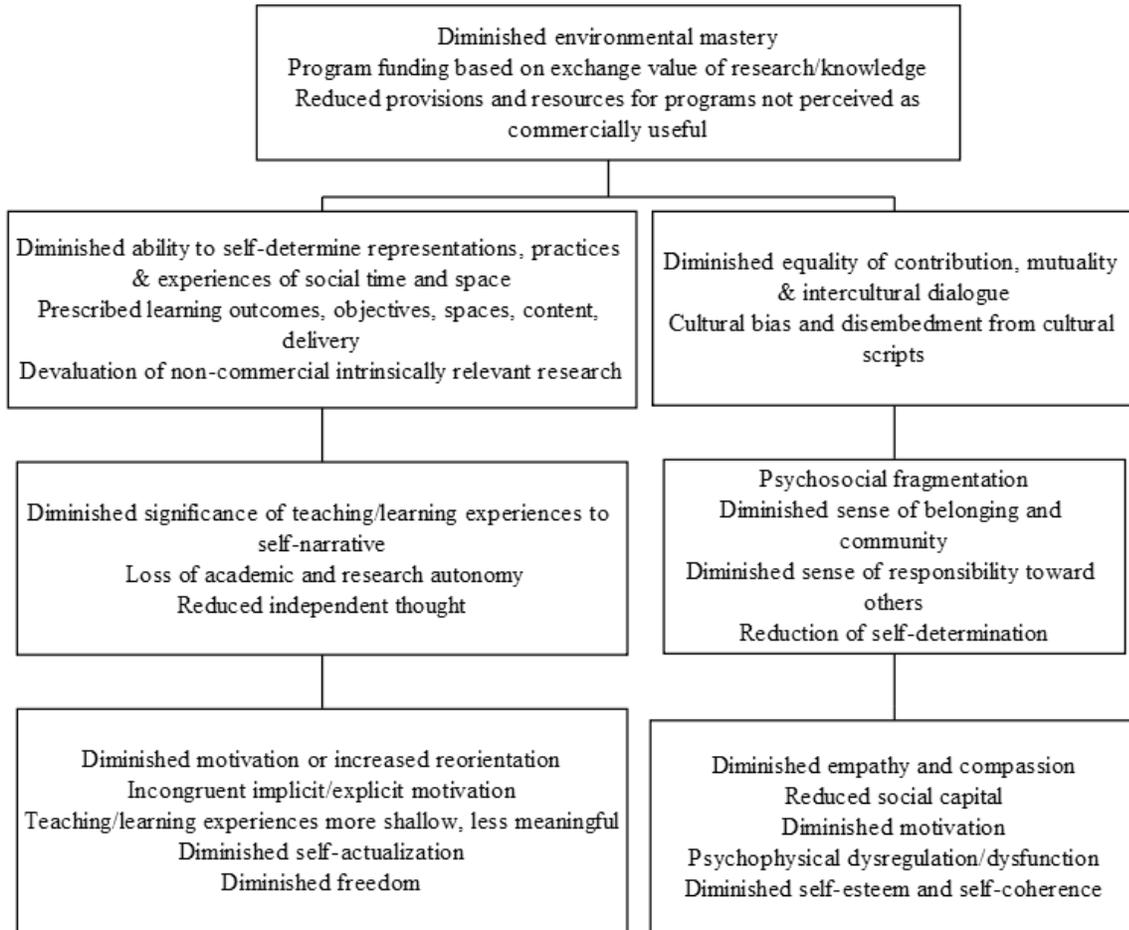


Figure 17. Teaching and Learning Level, Branch 3: Increased contract faculty, decreased fulltime faculty, increased numbers of non-academic administrators, students as customers/client experts, increased 3rd party pre-packaged courses

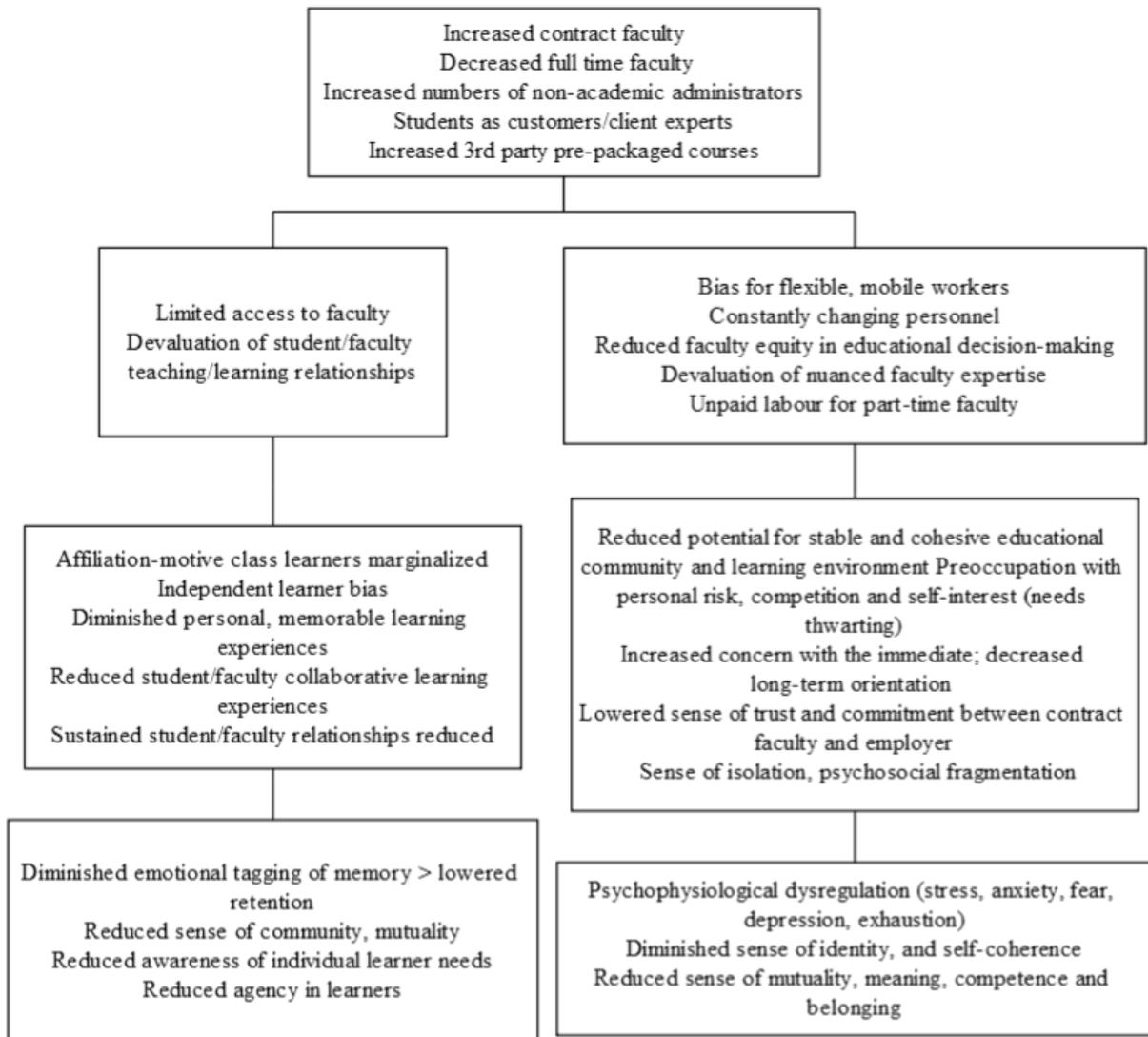


Figure 18. Teaching and Learning Level, Branch 4 – Goal = increased metric indicators of objective wellbeing, utilitarian view of creativity, applied/utilitarian courses

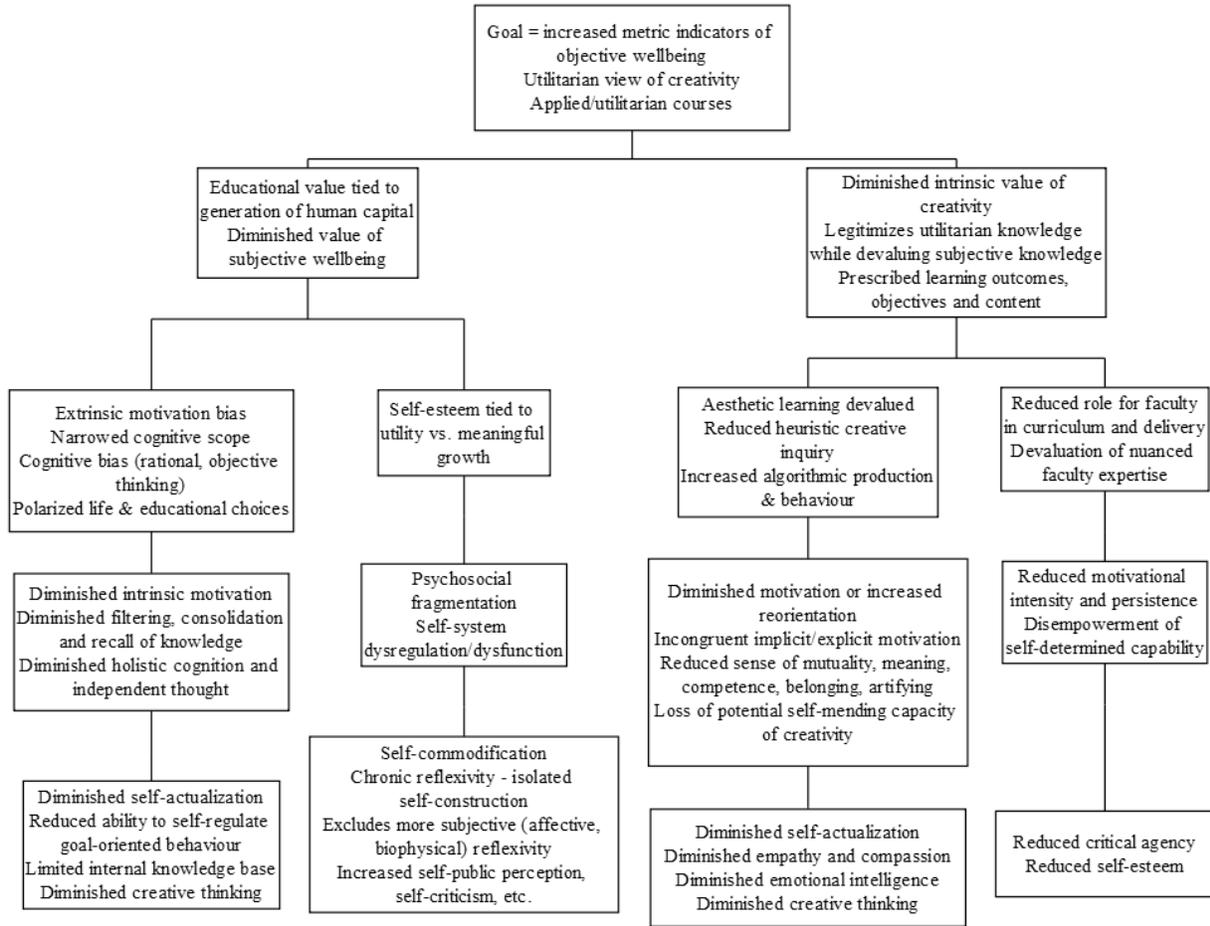


Figure 19. Teaching & Learning Level, Branch 5: Utilitarian speed & efficiency

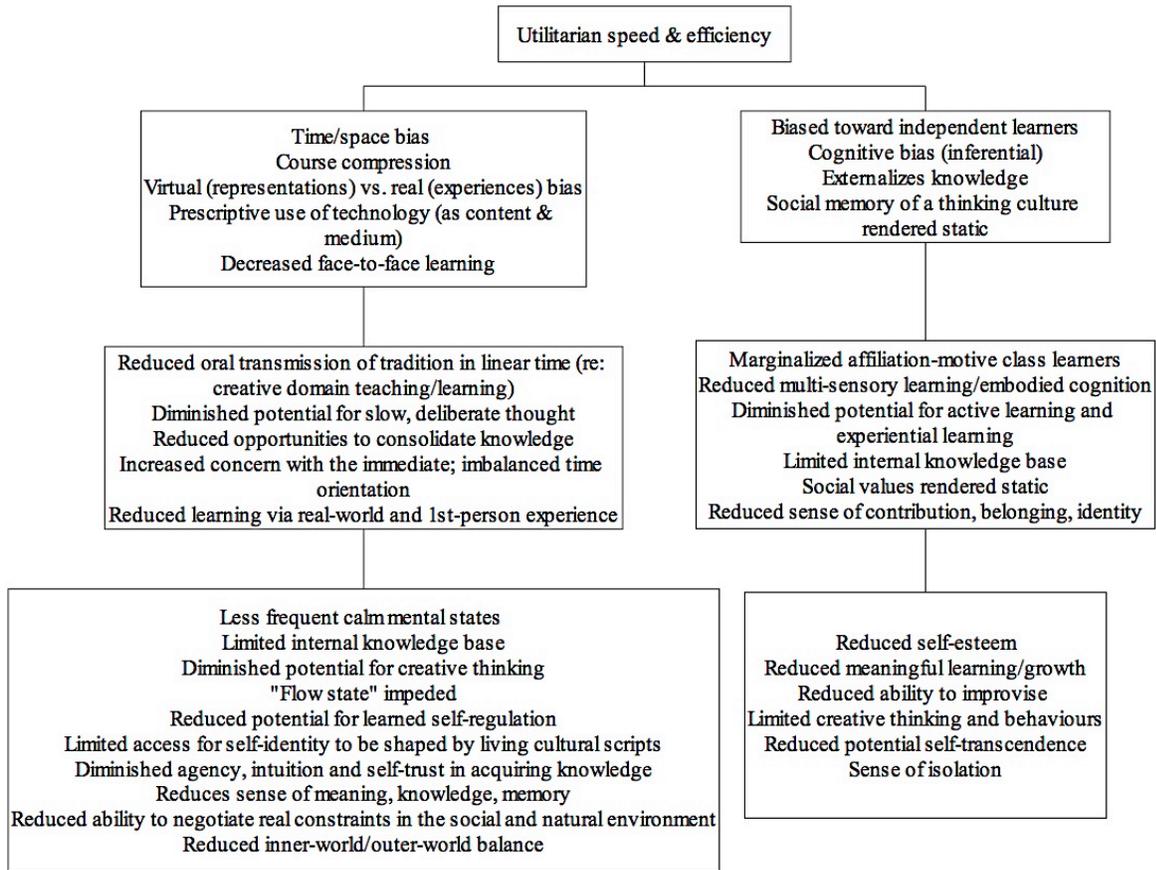
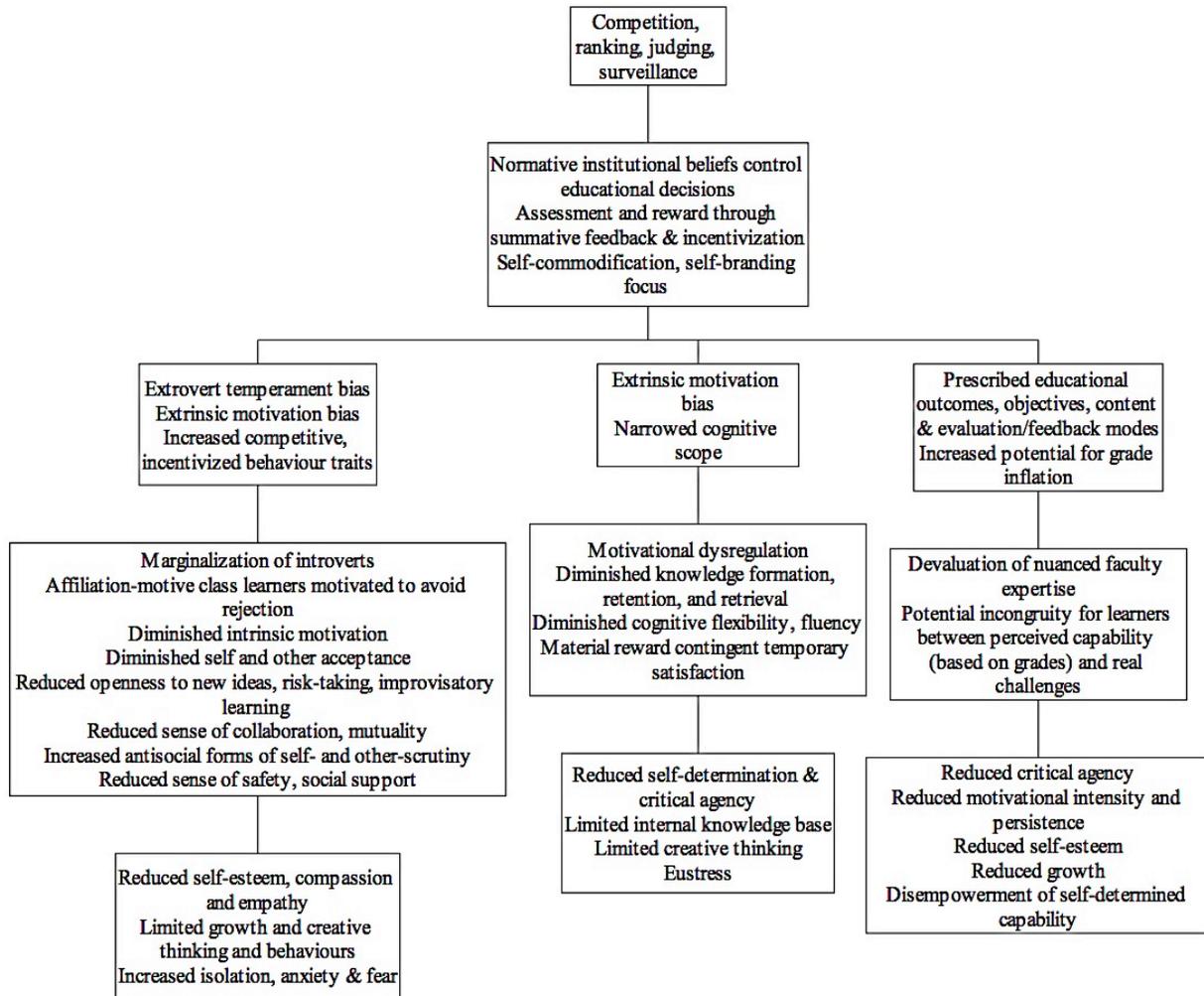


Figure 20. Teaching & Learning Level, Branch 6: Competition, ranking, judging, surveillance



8.4.1 Tier 2

Tier 2 (along with Tier 2a in the “Utilitarian” and “Competition” branches) of the teaching and learning level tends to reveal the effect of Tier 1 forces in terms of biases, values, beliefs and prescribed practices. These effects have been divided into groups below.

First, the prescribed realities of course compression, increased numbers of contract workers, and utilitarian and technological means and goals create a bias in the perception of time and space in

the educational domain. The Tier 2 and 2a effects most related to time-space-technology bias are:

- Constantly changing personnel
- Time/space bias
- Course compression
- Prescriptive use of technology
- Virtual (representations) vs. real (experiences) bias

The next set of effects relate to unequal power relations caused by increased tuition, use of contract faculty and the external prescription of program beliefs, goals, and values. The Tier 2 and 2a effects most closely related to power inequality are:

- Decreased access to education
- Limited access to faculty
- Diminished ability to self-determine cultural space and time representations, practices, and experiences
- Normative institutional beliefs control educational decisions
- Prescribed learning outcomes, objectives, spaces, content, delivery
- Increased algorithmic production and behaviour
- Prescribed evaluation/feedback modes through summative feedback and incentivisation
- Reduced faculty equity in educational decision-making and contributions
- Devaluation of nuanced faculty expertise
- Unpaid (hidden) labour for part-time faculty

Conceptions of education, research and creativity as self-reliant, utilitarian, objective, and commodified result in a bias in values, revealed in Tier 2 and 2a as a contingent assemblage of economics-politics-technology-creativity:

- Educational value tied to generation of human capital
- Diminished value of subjective wellbeing
- Diminished intrinsic value of creativity
- Legitimizes utilitarian knowledge while devaluing subjective knowledge
- Aesthetic learning devalued
- Reduced heuristic creative inquiry
- Devaluation of student/faculty teaching/learning relationships

- Devaluation of non-commercial intrinsically relevant research

The conceptions mentioned above, as well as a competitive environment and economic focus, also give rise to cognitive biases, exemplified at Tiers 2 and 2a as follows:

- Narrowed cognitive scope
- Rational, objective thinking
- Inferential processing of information
- Externalized knowledge
- Biased toward independent learners
- Attention distraction from education toward economic survival

The externally incentivized and competitive version of education also creates biophysical and motivational biases. This extrinsic motivation of institutions and students applies pressure on assessment practices to result in academic, status or economic rewards.

- Extrovert temperament bias
- Extrinsic motivation bias
- Increased competitive, incentivized behaviour traits
- Material reward contingent (temporary) satisfaction
- Increased potential for grade inflation

Conceptions of the self as determined by utilitarian values lead to the following effects at Tier 2/2a:

- Self-commodification, self-branding focus
- Bias for flexible, mobile workers
- Self-esteem tied to utility (and "winning") vs. meaningful growth
- Polarized life & educational choices

Finally, there are effects related to social and cultural relationships and values within the learning and creative context:

- Devaluation of student/faculty teaching/learning relationships
- Social memory of a thinking culture rendered static
- Cultural bias and disembedding from cultural scripts

- Diminished mutuality and intercultural dialogue

8.4.2 Tier 3

Tier 3 of the teaching/learning level reveals the effects of the Tier 2 forces. At Tier 3, we tend to see effects on the freedoms, provisions and resources needed to self-determine cultural representations, practices and experiences. These effects are revealed in experiences that are incongruent with self and cultural needs of learners and educators; that is, in the dysregulation of mediatory (motivation, self-regulation) and environmental (temporal, physical, social) subsystems of the SCWB model.

1. Temporal dysregulation

- Increased concern with or confinement by the immediate; imbalanced time orientation
- Decreased long-term orientation
- Diminished potential for slow, deliberate thought
- Reduced opportunities to consolidate knowledge
- Reduced oral transmission of tradition in linear time (re: creative domain teaching/learning)
- Social values rendered static

Creative wellbeing in part refers to a balanced time orientation, whereby the past informs the present. In creative domains, valuing the past is specifically important in that social memory (tradition, knowledge, practices) becomes “useful generalized [cognitive] motor programs” (Pressing, 53) or referents. These referents are important because they lessen the amount of cognitive processing energy needed to navigate and apply knowledge in real time, e.g., in performance or improvisation. They also provide a shared framework for intelligible communication of ideas between cultural members. Social representations and practices of time experienced, in other words “lived time,” include provision for slow deliberate thought,

opportunities to consolidate knowledge, and first-person experiential learning, which underpin the horizontal transmission of culture (face-to-face), e.g., the mentorship between and among teachers and learners. The hegemony of the 24/7 clock and time-space compression render the cultural values connected to time static. This change away from lived time, along with cultural-domain commodification, has been shown to lead to cultural fossilization, whereby the need to emphasize the exchange value of cultural practices and products essentially freezes them in time in order to appeal to third party cultural "investors" who require predictability. In contrast, creative wellbeing requires that culture be fluid: representations, practices, and experiences change constantly according to internal needs. This is what sustains the evolution of a culture or creative domain. Further, this temporal bias for speed and efficiency and a concern with the immediate is at odds with creative wellbeing because creativity involves explicit and implicit cognitive persistence...hard work that is “underpinned by motivation” over an “extended period of time” (Odena 2012, 201). In a performing arts program, this is the very time and persistence that leads to the masterful and artistic use of one's instrument or body. It cannot be sped up.

2. Psychocognitive dysregulation

When there is a cognition bias, experiences associated with the psychological processes of creative thinking are diminished. In Tier 3, we see evidence of this:

- Diminished filtering, consolidation and recall of knowledge
- Diminished holistic cognition and independent thought
- Reduced multi-sensory learning/embodied cognition
- Reduced learning via real-world and 1st-person experience
- Limited internal knowledge base

Creative wellbeing depends on holistic cognition, independent thought, and multi-sensory

learning; that is, it requires a combination of cognitive, affective and biophysical components (see Chapter 3). Further, self-coherence also requires that one's cognitive strengths not be marginalized by a cognitively biased society. As McGilchrist points out, not only does a “left-brain” bias impact the individual, it also negatively impacts interpersonal relations:

I believe that over time there has been a relentless growth of self-consciousness, leading to increasing difficulties in co-operation. The resultant instability is evidenced by alternations between more extreme positions; and, although there have been swings in the pendulum, the balance of power has shifted where it cannot afford to go—further and further towards the part-world created by the left hemisphere. (2009, ix)

Finally, creativity requires a deep knowledge base and real-world learning experiences. A bias toward disembodied, externalized, and distributed knowledge in performance domains, which by definition imply creative practices and interactions with real people in real time (though not exclusively), is inappropriate for the needs of arts program culture.

3. Affective dysregulation

Competition, surveillance, ranking, and judgement environments also contribute to over-prioritizing a narrow focus of our attention (executive center), and this emphasis on executive cognitive control can result in a fear center interruption of executive function (McGilchrist 2013). Additionally, creative processes and outcomes are, by their nature, unpredictable, so intensified attempts to control or extrinsically define them result in a paradoxical uncertainty. The unequal power relations that obtained at Tier 2 with regard to periodized employment and reduced management by faculty of educational content, delivery and assessment also play into this atmosphere of competition and distrust. We see many examples of uncertainty-related outcomes at Tier 3:

- Preoccupation with personal risk, competition and self-interest (needs thwarting)
- Increased antisocial forms of self- and other-scrutiny

- Reduced openness to new ideas, risk-taking, improvisatory learning
- Reduced sense of safety, social support
- Lowered sense of trust and commitment between faculty and employer
- Needs thwarting

No matter the cause, the inability to attenuate public self-perception/self-consciousness or the perception that one is not safe or supported is one of the greatest impediments to the risk-taking necessary for creativity. In a performing arts program, for example, stage fright is associated with the brain's executive centre when public self-consciousness is not attenuated. Additionally, constant self- or other-critique and competition are detrimental to learning, public performance and to improvisational and creative risk-taking. Finally, risk-taking that is healthy for educational creativity is diminished when program faculty or administrators experience institutional surveillance, distrust, competition, reduced openness to new ideas, or a lack of commitment and support.

4. Marginalization

In terms of participation in the creative culture, economic inequality and a limited, prescribed set of conceptions, values and practices relating to creative, vocational, and educational processes and products results in various types of marginalization, such as those seen at Tier 3:

- Exclusion of some community voices in creative democracy
- Reduced role for faculty in curriculum and delivery
- Devaluation of nuanced faculty expertise
- Marginalized affiliation-motive class
- Independent learner bias (marginalized collective learners)
- Marginalized affiliation-motive class learners
- Marginalization of introverts

When voices are lost, so are inter- and intra-cultural dialogue, diminishing the potential for encountering creative novelty, which flourishes when cultures interact. This includes diminished

potential for cooperative learning between and among learners, teachers, and administrators in a creative domain educational program. In addition, when certain bio-cognitive or cognitive traits, such as motive class, temperament, or learning mode are not valued in a mutually supportive atmosphere, not only does reduced participation in the domain occur, but self-coherence and subjectively meaningful learning and growth are diminished.

5. Reduction of self-determination

SCWB, a subjectively meaningful creative life, is not possible when experiences are less relevant to self-narrative and self-coherence or when the experiences themselves are limited or not possible. Examples of these effects are present in Tier 3:

- Loss of academic and research autonomy
- Diminished significance of teaching/learning experiences to self-narrative
- Diminished personal, memorable learning experiences
- Loss of potential self-mending capacity of creativity
- Diminished intrinsic motivation

In terms of education, if learning or teaching has no personal significance, is not self-determined or is perceived to be (or is) unachievable, the ability to self-regulate and motivate personal feelings, thought, and behaviour towards attaining self-esteem and meaningful growth is diminished, forestalling subjective creative wellbeing.

6. Psychosocial dysregulation

Creative wellbeing within a domain is increased when participants feel a sense of identity, belonging and participation in that culture. However, at Tier 3, we see examples of detachment from the psychosocial environment:

- Reduced student/faculty collaborative learning experiences
- Sustained student/faculty relationships reduced

- Reduced potential for stable and cohesive educational community and learning environment
- Psychosocial fragmentation
- Diminished sense of contribution, belonging, identity
- Reduced sense of collaboration, mutuality
- Reduced sense of mutuality, meaning, competence, belonging, artifying
- Diminished sense of responsibility toward others
- Diminished self and other acceptance
- Sense of isolation

Psychosocial disembedding from the traditional cultural/creative domain in favour of participation in a socially prescribed, post-traditional neoliberal framework contributes to the above outcomes. With this supposed liberation from cultural scripts comes the burden of “autonomous self-construction” (including the self-branding process) within an “abstract, impersonal system” (M. Adams 2007, 47) and a “disintegration” of the “primary interpersonal relations necessary for the development of autonomous selfhood...[replaced by] commodified ones” (114). Identity and intelligibility occur within a shared cultural framework; for example, participants in a performing arts program have shared people, language, cues, traditions, perceptions and experiences of particular significance to that culture or creative domain. When that cultural framework is replaced (even in part) by commodified and competitive relationships and commercialized content, mutuality, collaboration, community, identity and intelligibility within the program culture are necessarily reduced.

7. Motivational dysregulation

When self-determination of goals is undermined, or when capability to affect processes, outcomes and evaluation is reduced (e.g., via marginalization, skills/knowledge, resources or

external control), motivation suffers. Several examples of motivational dysregulation occur at Tier 3:

- Diminished motivation or increased reorientation
- Diminished motivational intensity and persistence
- Diminished intrinsic motivation
- Incongruent implicit/explicit motivation
- Marginalization of affiliation-motive class
- Affiliation-motive class learners motivated to avoid rejection
- Potential incongruity for learners between perceived capability (based on grades) and real challenges
- Eustress

When competency is externally rated in an environment of competition and external rewards such as grades, motivation can be affected, whether the grade is an A or an F. This occurs when participants' internal sense of capability is at odds with that measurement, when the result is negative, or when, having attained an incentivized goal, the motivation to direct and sustain attention on a given task diminishes. Impersonally orientated people are "characterized by [a focus on] anxiety concerning competence" (Ryan 2009, 2), while affiliation-motive class learners, in an atmosphere of competition, focus on avoiding rejection. In the first case, the being extrinsically motivated creates stress, and in the second, the incongruity between intrinsic needs and explicit actions causes stress. Intrinsic motivation and congruency between motivations and actions are integral to meaningful growth, self-identity, self-determination, and the cognitive processes of creative thinking; that is, they are necessary for SCWB.

8.4.3 Tier 4

This tier reveals how dysregulation in the temporal, cognitive, affective, social, self-regulatory and motivational subsystems at Tier 3 are manifested as negative feedback in the four dimensions of the self-system.

1. Affective dimension

- Anxiety/stress
- Less frequent calm mental states
- Psychophysiological dysregulation (stress, anxiety, depression)
- Diminished emotional intelligence
- Diminished mindfulness
- Diminished attention and focus
- Diminished potential for “Flow state”
- Reduced ability to self-regulate goal-oriented behaviour
- Reduced ability to improvise
- Diminished creative thinking
- Diminished time for rest and memory consolidation

Openness to new experiences, patience, sustained attention, and perseverance in meeting challenges are just some behaviour traits associated with subjective creative wellbeing, all of which depend on a calm mental state (Chapter 3, 4, and 7). However, the experiences associated with the forces at Tier 3 reveal increased restless mental states (Chapters 4 and 7). Learners and teachers are likely to display increased stress, anxiety, depression, and even fear. These maladaptive affective states and behaviours impede adaptive feelings, thoughts, and behaviours known to be necessary for creative processes such as flow state, risk taking, independent and creative thought, self-trust and other trust, and improvisation. These maladaptive feelings also diminish the potential for the rest needed to consolidate memory (Chapter 6). They are indicative of a dysregulated self-system, confined to the immediate (imbalanced time orientation) and externally mediated, illustrated by an inability to attenuate public-self-perception (Chapter 7). The self, confined in this way, is suffering an “implosion,” a self-crushing by the weight of self-censorship, self-policing, self-reification, self-reliance, and self-authorship, under the added weight of “evaluation, surveillance, reward, competition, restriction of choice, and time pressures” (Amabile 1985, 394) (see Chapter 4). It is for these very reasons SCWB emphasizes a need for

self-compassion: periods of mindful, non-judgmental self-awareness and even time for non-identity (needed for temporal coherence, see Chapter 2). In addition, SCWB focuses on the creative process rather than the outcome. This not only reduces negative self- and other-criticism, but also increases the ability to self-regulate stressors that are associated with naturally-occurring negative feedback. These skills and strategies are not simply reactive—utilitarian means to facilitate resilience in the face of stress—but are essential ongoing characteristics of SCWB.

2. Social dimension

The suppression of culturally determined representations, practices, and experiences, along with the prescription of global meanings via normative institutional beliefs, results in a disembedding from the cultural scripts that could be used in the reflexive process towards the ongoing management of self and group identity. The large number of negative effects on the social dimension listed below illustrate the importance of cultural embedment:

- Limited access for self-identity to be shaped by living cultural scripts
- Diminished sense of identity
- Reduced inner-world/outer-world balance
- Diminished self-coherence
- Diminished self-actualization
- Self-commodification
- Increased self-public perception, self-criticism, etc.
- Chronic reflexivity - isolated self-construction, exhaustion
- Sense of isolation
- Diminished sense of belonging, contribution and self-esteem
- Reduced sense of mutuality, meaning, competence
- Reduced sense of community
- Reduced social capital
- Diminished emotional intelligence
- Diminished mindfulness
- Diminished self and other empathy and compassion
- Reduced awareness of individual learner needs

As mentioned at Tier 3, the loss of a cultural framework in favour of prescribed representations and practices diminishes a sense of cultural and personal identity and intelligibility.

Disembedding from culture also diminishes the role of emotional learning, which involves “self-awareness, self-management, social awareness, relationship skills, and mindful decision-making” (Collaborative for Academic, Social, and Emotional Learning (CASEL) 2013, 9). Instead, the prescribed framework favours traits and behaviours aligned with market competition. In terms of the self-systems of participants in the example performing arts program, these maladaptive traits in combination with a competitive atmosphere essentially isolate and create self- and group identity problems for learners and teachers. Rather than a socially constructed self-identity, a self-produced one is emphasized (M. Adams 2007). The commodified self requires chronic reflexivity: self-censoring, policing, and self-criticism that is both exhausting and harmful to aspects of SCWB such as attenuation of public self-perception, intrinsic motivation, self-regulation, self-transcendence, and a need for meaningful growth, full scope capacity, and critical agency.

When a sense of mutuality, community, empathy, and compassion are reduced, SCWB is diminished. These intrinsic values and states of mind are necessary in a social environment, such as that of a performing arts program, that aims to foster an individual and group sense of self-identity, self-acceptance, self-confidence, openness to and respect for differences, and democratic dialogue. However, in the prescribed social learning and working conditions of the example, where values such as competition, self-concern, self-reliance, and being concerned with the immediate are emphasized, SCWB communal values are diminished. Diminished empathy and compassion also results from biases against aesthetic learning (Chapter 3) that

fosters “the experience of understanding; an entirety of emotionality and rationality” Rasmussen 1990 in (Austring and Sørensen 2010). These maladaptive feelings reveal a dysregulation of the self-system. SCWB, however, emphasizes a regulated self-system. If we assume that “who we are” is inseparable from “how we feel,” particularly where creativity and wellbeing are concerned, a view of connection as a utilitarian and rational exercise is inadequate.

3. Cognitive dimension

The outcomes in the list below reveal that the full scope capacity of learners is negatively affected by the cognitive restrictions inherent in utilitarian views of creativity and education.

- Incongruent implicit/explicit motivation
- Narrowed cognitive scope
- Affiliation-motive class learners marginalized
- Diminished agency, intuition and self-trust in acquiring knowledge
- Limited internal shared knowledge base
- Reduced self-determination and critical agency
- Excludes more subjective (affective, biophysical) reflexivity
- Reduced motivational intensity and persistence
- Reduced potential self-transcendence
- Reduces sense of purpose of knowledge, memory
- Diminished intrinsic motivation

Motivational dysregulation is salient here. Motivation directly impacts knowledge and memory (information filtering, retention, and consolidation, internal knowledge base/referents) and cognition (holistic cognition (including affective learning), cognitive scope, cognitive efficiency, fluency, flexibility, and perceptual learning). When cognition and knowledge/memory are dysregulated, this can diminish self-coherence, the understanding that “perceived events make logical sense, the ways in which individuals feel they can “cope” and/or “manage,” and whether they feel challenges are “meaningful, worthy of commitment” (Collingwood 2015). This view

undermines basic learning and teaching strategies such as fostering and facilitating intrinsic motivation, motive-relevant learning, linking explicit goals to implicit motives, providing formative feedback (non-graded, ongoing communication between teacher and learner and peers towards self-management and meaningful growth), and avoiding incentivisation that orientates learners extrinsically. Further, when the more subjective (affective) and biophysical reflexivity needed for fostering a sense of self-coherence is diminished, this can result in reduced motivational intensity and persistence, and a negative cycle occurs. In fact, some learners themselves are marginalized because of cognitive biases toward the rational, objective thinking and self-reliance inherent in utilitarian education. Self-worth that is contingent on external metrics also diminishes self-trust, self-determination, and ultimately critical agency. Both distress and eustress can result if goal satisfaction is constantly linked to engagement contingent, completion contingent, and performance contingent rewards. If this is the case, SCWB is negated. SCWB emphasizes a need for a more balanced way to consider the world.

4. Physiological dimension

- Anxiety/stress/fear/depression/exhaustion
- Psychophysical dysregulation/dysfunction
- Eustress/distress
- Excludes more subjective (affective) and biophysical reflexivity
- Reduced inner-world/outer-world balance

The prescription of technology (which reduces the inner-outer world balance) and self-commodification as tools has limited the ability of the physiological dimension of the self-system to contribute to SCWB in the learning and teaching environment. This dimension of the self-system contributes to cognition in that “sensorimotor capacities” of the “body” are “embedded in a more encompassing biological psychological and cultural context” (Rosch, Thompson and Varela 1993, 172-3). Multi-sensory perceptual learning and mirror systems used

in the traditional first-person transmission of cultural knowledge in ‘lived time and space’ require biophysical (and social) participation in learning which the prescriptive use of technology may suppress. Mind-body-tool, an extended form of embodied cognition, is crucial to the development of mastery in the use of a tool such as a musical instrument. Crawford writes:

Through the exercise of a skill, the self that acts in the world takes on a definite shape. It comes to be in relation of fit to a world it has grasped....If the attentive self is in relation to a world it has apprehended, the autonomous self is in relation of creative mastery to a world it has projected. (25)

The disembodied nature of prescribed virtual delivery “divorces the articulate content of knowledge from the pragmatic setting in which its value becomes apparent” (Crawford, 256).

Limiting knowledge to the objective results in learners’ being “cut off from identifiable, responsible sources of authority outside of [themselves]” (205) located in the real world SCWB requires that agency not be conceived in the context of “mere choices”:

but rather, somewhat paradoxically, in the context of submission to things that have their own intractable ways, whether the thing be a musical instrument, a garden, or the building of a bridge. (24)

Not only does the physiological self contribute uniquely and valuably to SCWB in the areas of cognition and agency in a real world, a social and natural one, it plays an important part in the LSR of emotions and goal directed thoughts and behavior.

Prescribed curriculum objectives and goals are counter-productive for self-regulating adaptive feelings and thoughts related to goal directed behaviour. SCWB encompasses the notion that, rather than relying on rationality in creative problem solving, a more holistic approach includes applying compassionate sensation and imagery skills (Gilbert 2009, 204-5). In order for these skills to be fostered, a first-person (biophysical) engagement with the world on an ongoing basis is needed, something a virtual

environment cannot facilitate.

“People who inherit certain traits tend to seek out life experiences that reinforce those characteristics [according to the] theory of gene-environment interaction” (Cain 2013, 109). A bias for extroversion and self-commodification undermines the predetermined biological needs of introverts and those who are not competition-motivated. In fact, these external prescriptions can increase maladaptive thoughts feelings and behaviour in biologically high reactive individuals that impedes learning, creative risk taking, improvisation, and other indicators of SCWB. This incongruence between implicit motives of individuals and the explicit motives in the example program results in “poor performance” and the seeking of “social approval” rather than self-endorsed competence (Schultheiss 2008, 610), aggression over others rather than “sharing and teaching” (Woike and Bender, 712), and participation out of “fear of rejection” rather than “hopes of success” (Schultheiss, 609-13). Biophysically, this is exhausting and stressful.

8.5 IMPLICATIONS

The SWCB model applied to the hypothetical performing arts program in the context of a neoliberal, globalized environment highlights a number of important things. First, the model can be applied both to cultures (as in the case of the creative domain of a performing arts program) and to individuals within a culture. This supports the idea that creative domains are analogous to cultures and are subject to the same forces and dysregulation as any socially constructed self-system. Secondly, the forces that exist within the suprasystem, given the research explored in this paper, have identifiable and predictable effects on multiple subsystems, including the self-system, reinforcing the idea of permeability between and among the subsystems and self-system.

Specifically, forces in the form of contingent assemblages associated with the dominant ideology (space–time–technology and economics–politics–technology–creativity) are prescriptive and thus constrain the critical agency of individuals and groups within the given domain. In the example, governments and institutional administrations, as social engineers, restructure cultural representations, practices, and experiences within the program culture, in order to respond to global forces governed primarily by economic welfare concerns.

Through the application of this case study to the SCWB model, specific biases associated with neoliberal social engineering and contingent assemblages were revealed at all three levels:

1. time bias: time-space compression, hyper-concern with the immediate
2. metric welfare bias: GDP/capitalism, education
3. values bias: exchange value, utilitarian value
4. cognition bias: inferential and "left brained" (rational, common sense)
5. knowledge bias: utilitarian, external, distributed
6. memory bias: disembodied memory formation
7. economy/industry bias: creative and knowledge economy
8. tool bias: information, technology, communication
9. talent bias: creative class, technologically skilled, marketable
10. spatial bias: urbanization, creative cities, virtual spaces
11. temperament bias: extroversion (culture of personality)
12. dependence bias: self-reliance, independence
13. discourse bias: 'common sense' objectivity

These environmental constraints, if incongruent with self-determined values, beliefs, and goals, or if incongruent with capabilities or intrinsic psychophysiological states, are interpreted as negative feedback in both the motivation and self-regulation systems, causing them to dysregulate. This was especially apparent at Tier 3 of the Teaching and Learning Level in the example. When this incongruence occurs, the energy exertion inequality in the mediating systems that results from repeatedly encountering these assemblages and biases in the

environmental subsystems effectively oppresses the self-system (in this case, the program culture or its participants). As a result, self-determined, culture-based needs and subjective wellbeing are negatively impacted. If the energy exerted by systems is not mutually organized, entropy will occur, systems will not evolve, and SCWB will be thwarted.

The ways in which these mediating subsystems respond, both consciously and subconsciously, to negative feedback from the environment have much to do with the ongoing monitoring and maintenance of SCWB. When they are dysregulated, negative effects on the self-system and on SCWB follow, as was seen at Tier 4 of the Teaching and Learning Level of the example.

Specifically, biases such as those listed above indicate unequal distribution of provisions, resources and freedoms necessary to meet human needs: safety, self-esteem, meaningful growth, transcendence, self and group identity, inclusion, mutuality, self-coherence, holistic cognition, and psychophysical self-regulation (including affective and motivational regulation). When these needs are not met, SCWB cannot occur, learning (especially in arts domains) cannot occur, and, in fact, maladaptive thoughts, feelings and behaviours arise, as they did in the example.

9. CONCLUSION

9.1 SUMMARY OF WORK AND FINDINGS

Throughout this dissertation, components and processes of creativity and of wellbeing, along with their salient points of interrelationship have been researched and compiled. From this, a conception of Subjective Creative Wellbeing (SCWB) as a complex, socially constructed system was proposed. The research provides a set of indicators that can be used in identifying forces and states that either facilitate or threaten SCWB. An indexed summary of indicators is located in Appendix D. Based on the research, a preliminary systems model of SCWB was proposed. The suprasystem is comprised of temporal, physical and social environment subsystems, a contingent assemblage subsystem to account for tenacious groupings of forces arising from those environments, the mediating subsystems of motivation and self-regulation, and a self-system with affective, cognitive, social and physiological dimensions.

A primary goal was to develop a working model that could account for the interrelationships between and among all systems at play in SCWB in order to identify causes of apparent dysfunction in SCWB, especially in creative and performing arts and arts education domains, in the early 21st century. This dysfunction was thought to be connected to the ways in which the dominant ideological forces of neoliberalism and globalization are manifested in creative domains and education. Therefore, the model and associated research were applied to a post-secondary performing arts program example, assuming the program culture (the creative educational domain) and/or its participants as the “self” situated in the environmental forces and contingent assemblages of neoliberalism and globalization.

The application of the model and the associated research resulted in the identification and prediction of many negative indicators of SCWB arising from global, governmental and institutional neoliberal agendas. These indicators included biases in values, social and power relationships, time-space environments, psychophysiology, knowledge, discourse, cognition, tools, and motivational orientations that result in or predict dysregulation of temporal, physical, social, motivational and self-regulatory subsystems, and that, ultimately, create the environment for dysfunctional or maladaptive states, thinking, emotions and behaviours in all dimensions of the self-system.

9.2 SIGNIFICANCE AND POTENTIAL AREAS FOR FUTURE INQUIRY

This dissertation contributes to the study of creativity in several ways, and points to a number of potential avenues for future inquiry. Firstly, knowledge at the intersections of broad research domains in this paper (cognition, psychology, sociology, physiology, etc.) can be used to provide an informed approach/reference for decision-making related to creativity, creative wellbeing, cultural wellbeing, and learning. This can aid in more effectively meeting creative wellbeing criteria for individuals and cultures/domains. Key criteria include:

1. The rights, freedoms, provisions, and resources to self-determine, facilitate, sustain and protect the temporal, physical and socio-cultural environment for creativity;
2. Access to cultural representations, practices, and experiences in order to participate in and sustain cultural evolution and to facilitate memory, self-identify, sense of belonging, contribution, esteem, actualization, coherence, agency, and intelligible novelty;
3. The facilitation and fostering of holistic cognition, including multi-sensory learning, aesthetic learning and heuristic research;
4. Intrinsic motivation;
5. Learned self-regulation of feelings, thoughts and behaviours related to goal pursuit;
6. Emotional intelligence, empathy, compassion, self-transcendence, critical citizenship;
7. Ongoing, meaningful full-capacity growth;
8. A balance of affective, cognitive, physiological, and social wellbeing;

A more complete list of SCWB indicators is provided in Appendix D. These criteria can also be extended for use as an impact assessment referent connected to the outcomes of creativity policy, as part of secondary analysis.

Secondly, this study may provide a synthesis of research that could be used towards the formation of a recognized subjective creative wellbeing index, which can help in the navigation and management of human growth potential, so that everyone has the freedoms, provisions and resources to enable a meaningful creative life and thus, a meaningful human experience.

Fostering and facilitating human centered progress via creative participation can and should be viewed not only as a reactive therapeutic measure, but as a proactive life management system.

Third, this dissertation provides insight into how and why decisions about creativity and wellbeing in one part of the world affect others. The plight of the Akas, Malians, and Maasai, as well as the lot of the invisible "army of servants" who serve the Creative Class, illustrate the effects of global interests affecting local populations, their culture, their ecosystems and by extension, their creative wellbeing. A global-scope sense of responsibility, critical citizenship, is essential if SCWB is desired.

Finally, this dissertation is intended to be an important advocacy tool for culture-based creativity initiatives and people-centered development, at the experiential level, in the context of real lives, in that it emphasizes creative wellbeing as an essential aspect of human and cultural wellbeing.

One of the most significant aspects of SCWB involves conceiving of creative domains as cultures. If this is so, it suggests that the same moral and ethical criteria must be applied in

decision-making processes concerning creative domain welfare as are applied to facilitate, sustain and protect the rights, freedoms, resources and provisions of any other culture. Human dignity, the freedom to reason, autonomy, equality, and the development of capabilities (Langlois 2013, 17-18) are essential to SCWB in all individuals and groups, including, for example, learners or artists in creative domains. It follows, then, that policy-makers bear ethical and professional responsibility for providing the freedoms, provisions and resources that make SCWB possible.

As an advocacy tool, the model and research can also be used to challenge established and/or biased ways of thinking about creativity and the authority by which they occur. For example, this dissertation revealed the ways in which the established biases and directly and indirectly maintained assemblages of time-space-technology and economics-politics-technology-creativity inherent in neoliberal globalization efforts undermine SCWB at the individual and cultural level in post-secondary arts education. Whether intentional or not, “any form of coercion or control requires justification” (Bovitch, et al. 2011). Roszak (2003) asks:

Why do we set our standard of sanity so cautiously low? Can we imagine no better model than the dutiful consumer, the well-adjusted breadwinner? Why not the saint, the sage, the artist? Why not all that is highest and finest in our species? (45)

The more holistic and cross-disciplinary conception of creativity and of creative wellbeing presented here can be used to question decisions that effectively maintain these limiting assemblages at governmental, institutional, cultural or individual levels.

As part of that questioning process, the role of government in meeting broader indicators of creative wellbeing must be examined. This begins with questioning how social, environmental,

and temporal goals associated with subjective creative wellbeing, rather than those aligned with GDP, could be achieved. In order to do this, decision-makers need to be freed from the confines of “suffering from an absence of doubt” (Freire 1970, 23), and consider the effects of economic, cultural and educational policy in relation to the wider reality of the creative wellbeing in the social and natural environment. Although the following excerpt referred to ethnic or national cultures, given our assumptions that creative domains are analogous to cultures, it applies to them as well:

Our twentieth-century fin de siècle is a turning-point in history. An old order passes, and the surface of the entire globe begins to break up. In the plate tectonics of history, pieces of the earth are on the move. We cannot stand idly by as mere passive witnesses to the ultra-rapid mutations of our world as it adapts to historic, social, economic and cultural upheaval on an unprecedented scale (6)...Any development effort is thus doomed to failure if it is not founded on respect for the different cultures, for their equal dignity and their diversity, on their rich potential and on their vigour, on the resources of cultural exchange and on intercultural dialogue. (UNESCO 1993, 2)

Moving beyond metrics includes questioning the limits of governmental, institutional and corporate roles in prescribing what research, programming, content, delivery and assessment is supported or valued and what is not. Business interests are focused on sustaining the “social and institutional barriers to better measures of progress” by holding to pervasive beliefs such as “growth is good” (Costanza, Hart and Posner, et al. 2009, 27) or to values related to speed and efficiency. Their economic success relies on these beliefs and values, and they shape and are shaped by neoliberal discourse. However, when these beliefs, values and discourse permeate the walls of educational institutions, they promote cognitive, affective, social and physiological biases; dictate to and inherently marginalize many creative voices; and thus suppress independent thought and self-determined, subjective creative wellbeing. The hegemony of a 24/7 clock and of time-space-compression has resulted less leisure time available to benefit from the intrinsic value of creative participation and to less learning time for the development of deep

knowledge. It has also led to the deterioration of social space and time and to disembedding from cultural scripts, and therefore, to the deterioration of the social representations, practices and experiences that cultures rely on for sustainability and evolution. The exploitation of human capital towards the extrinsic rewards of the marketplace fuels a competitive, anti-social atmosphere, which also undermines aspects of SCWB such as self-transcendence, mutuality, compassion, and sharing.

Support, incentivization for, and normalization of business involvement in education and research should be re-examined, not only because commodification is detrimental to creativity and learning, but because it undermines the right to creative self-determination and devalues the expertise within institutional or program cultures. Governments and institutions must find ways to enable creative and educational domain participants to reclaim their critical agency and academic freedom rather than causing or allowing them to be “indoctrinated as a crucial part of the framework” (Leistyna and Sherblom 1995, 128). As Holder (2006) asserts, “an assault on a group’s capacity to use, access, produce, or maintain the materials of participation is an assault on their capacity to pursue the activity at all, and as such is an assault on each of them as a human being” (91).

9.3 TOWARD A HOLISTIC CONCEPTION OF CREATIVITY

Creativity resists any single or limited definition or conception. Any account of creativity should conceive of it as a non-linear, self-ordering, experiential, transformative, contextual, environmentally constrained, complex and multi-dimensional (subsystems of SCWB), cyclic process, symbolically representative of use value related directly to wellbeing. Limiting this

understanding or reducing its complexity, through lack of knowledge or by design, results in limited effectiveness in fostering creativity, and in many cases, undermines it instead.

Contemporary policy makers tend to perceive creativity as a “resource or a good” (Holder 2006, 78), and there is a tendency to press much research on creativity into corporate service.

However, exploiting any resource can result in deterioration of the resource, uneven distribution of investment, and uneven distribution of the generated revenue. In terms of creativity, such commodification marginalizes creative resources, processes and products with primarily intrinsic, socio-cultural and environmental value, and legitimizes creative resources, processes and products with exchange value. This creative exchange-value and achievement bias is perhaps no more evident than in the rush to design and build "creative cities" as incubators for exploitable creative ideas and objects. These cities are led by the "creative class" and their “army of servants” (who, given their non-descript labeling, do not seem to be recognized as creative beings, or are perhaps not recognized at all). The irony is that the widely-accepted implementation of this policy in fact undermines necessary creative processes, excludes creative voices, and results in more homogeneity, less openness, and fewer creative influences and ideas.

Creative cities are products or partners of neoliberalism and globalization. The discourse positions globalization as a sort of utopia for humanism, while measuring evolution and progress in relation to democratic capitalism and materialism. This discourse perpetuates a “conceit...that the western society is the pinnacle of human aspiration and that all other cultures are striving to reach it” (Eede 2011). Governments embrace 21st century skills, the knowledge economy, the creative economy, and so on in large part because they have placed blind faith in the supremacy of the GDP as an indicator of welfare and in creative cities as a means to spin rust into gold, even

when both are widely acknowledged as inadequate or flawed. Perhaps their faith is not blind but is resigned or indoctrinated; after all, swimming upstream is difficult, especially when you don't know you're in the water. In any event, the great and unfortunate paradox is that the practices of this faith include generating and maintaining a closed order that neither facilitates nor fosters creative wellbeing, but instead undermines it. Freire reflects on this very concern saying:

Man's ontological vocation...is to be a subject who acts upon and transforms his world, and in doing [so] moves ever new possibilities of fuller and richer life individually and collectively...This world to which he relates is not a static and closed order, a given reality which man must accept and to which he must adjust; rather it is a problem to be worked on and solved. (Freire 1970, 12-13)

Any claim that one metric, such as the GDP, can account for the complexities of human welfare or measure "creative success" is woefully shortsighted, and this is the problem to be solved.

Humans are capable of so much more than creating money, and governments are capable of so much more than conceiving of "growth" in such limited terms. "In our relentless search for 'development' and material progress, it is possible we have alienated ourselves from our deepest human needs, which surely lie in our connections to each other and the Earth" (Eede 2011). An understanding of creativity must account for broader environmental, temporal, social, motivational and self-regulatory needs. It must include room for subjectivity and ambiguity. It must sustain wellbeing. The present research compilation and SCWB model offer starting points for that discussion.

When the value of creativity is redirected from *freeing* people's minds of market manipulations and instead begins to *serve* the market, both creativity and wellbeing suffer. The role of creativity in learning environments and creative domains should be creativity itself, and the role

of decision-makers should be simply to facilitate and foster creative wellbeing and participation in which the product is, and has always been, the dynamic self.

REFERENCES

- Adams, K. 2005. *The Sources of Creation and Innovation*. Washington: National Center for Education and the Economy.
- Adams, M. 2007. *Self and Social Change*. Thousand Oaks, CA: Sage Publications Inc.
- Addis, L. 1999. *Of Mind and Music*. New York: Cornell University Press.
- Alvesson, M. 2007. *Reflexivity*. (G. Ritzer, Ed.) Retrieved 03 12, 2016, from Blackwell Encyclopedia of Sociology: <http://www.sociologyencyclopedia.com/public/>
- Alvesson, M., & Sköldbberg, k. 2009. *Reflexive Methodology: New Vistas for Qualitative Research* (Second ed.). Thousand Oaks, CA: Sage.
- Amabile, T. 1996. *Creativity in Context*. Boulder, CO: Harvard University Press.
- Amabile, T. M. 1992. *Growing Up Creative* (2nd ed.). Buffalo, NY: Creative Education Foundation Press.
- Amabile, T. M. 1998. How to Kill Creativity. *Harvard Business Review*, September, 77-87.
- Amabile, T. M. 1985. Motivation and Creativity: Effects of Motivational Orientation on Creative Writers. *Journal of Personality and Social Psychology*, 48 (2), 393-99.
- Andreasen, N. 2005. *The Creative Brain: The Science of Genius*. New York, U.S: Plume.
- Ashram, H. 2013. *Interactive Education; Impact of the Internet on Learning and Teaching*. (EOF, Producer) Retrieved 06 08, 2014, from ubalt.edu: <http://home.ubalt.edu/ntsbarsh/interactive.htm>
- Austring, B. D., & Sørensen, M. 2012. A Scandinavian View on the Aesthetics as a Learning Media. *Journal of Modern Education Review*, 2 (2), 90-101.
- Austring, B. D., & Sørensen, M. C. 2010. *Aesthetics and Learning*. University College Sjælland. pixel-online.net.
- B.C. Premier's Technology Council. 2010, 12. A Vision for 21st Century Education.
- Baber, H. E. 2010. Worlds, Capabilities and Wellbeing. *Ethical Theory and Moral Practice*, 13 (4), 377-92. doi: 10.1007/s10677-009-9207-1

- Baer, R. A. 2003. Mindfulness Training as a Clinical Intervention: A Conceptual and Empirical Review. *Clinical psychology: Science and practice*, 10 (2), 125-43. doi: 10.1093/clipsy.bpg015
- Bandura, A. 1999. Social Cognitive Theory of Personality. In P. L., & O. John (Eds.), *Handbook of personality* (2nd edition ed., pp. 154-96). New York: Guilford Publications.
- Bandura, A. 1989. Social cognitive theory. In R. Vasta (Ed.), *Annals of child development. Six theories of child development* (Vol. 6, pp. 1-60). Greenwich, CT: JAI Press.
- Banich, M. T., Mackiewicz, K. L., Dupue, B. E., Whitmer, A., Miller, G. A., & Heller, W. 2009. Cognitive Control Mechanisms, Emotion & Memory: A neural perspective with implications for psychopathology. *Neuroscience Biobehaviour Review*, 33 (5), 613-630. doi: org/10.1016/j.neubiorev.2008.09.010
- Barker, C. 2012. *Cultural Studies: Theory and Practice* (Fourth ed.). Thousand Oaks, CA: Sage Publications Inc.
- Barnett, C. 2010. Publics and Markets: What's wrong with Neoliberalism? In S. Smith, S. Marston, R. Pain, & J. P. Jones III (Eds.), *The Handbook of Social Geography*. New York: Sage.
- Bauman, Z. 2004. *Identity*. Cambridge: Polity Press.
- Baumeister, R. F. 2011. *The "Self." Social Psychology and Human Nature*. Second edition. Belmont, CA: Cengage Learning.
- Beer, D. 2016, 05 24. *Is neoliberalism making you anxious? Metrics and the production of uncertainty*. (B. P. LSE, Producer) Retrieved 07 07, 2016, from lse.ac.uk: <http://blogs.lse.ac.uk/politicsandpolicy/55395-2/>
- Belot, S. 2015, 02 09. *What is the relationship between mindfulness and "flow"?* Retrieved 01 12, 2016, from Quora: <https://www.quora.com/What-is-the-relationship-between-mindfulness-and-flow>
- Bender, M., Woike, B., Burke, C. T., & Dow, E. A. 2012. The relationship between implicit and explicit motives, goal pursuit, and autobiographical memory content during a diary study. *Journal of research in Personality*, 46 (4), 374-83. doi: org/10.1016/j.jrp.2012.03.005
- Benzie, R., Champion-Smith, B., & Whittington, L. 2008, 09 24. *Ordinary folks don't care about arts: Harper*. Retrieved 10 05, 2015, from thestar.com: http://www.thestar.com/news/politics/federalection/2008/09/24/ordinary_folks_dont_care_about_arts_harper.html

- Berendt, J.-E. H. 2009. *The Jazz Book; From Ragtime to the 21st Century*. Chicago: Lawrence Hill Books.
- Bergmann, W. 1992. The Problem of Time in Sociology; An overview of the literature on the state of theory and research on the 'Sociology of Time,' 1900-82. *Time & Society*, 1 (1), 81-134. doi: 10.1177/0961463X92001001007
- Berkowitz, A. 2010. *The Improvising Mind: Cognition and Creativity in the Musical Moment*. New York: Oxford University Press.
- Berlin, I. 1969. Two Concepts of Liberty. In I. Berlin, *Four Essays on Liberty*. Oxford: Oxford University Press.
- Berns, G. S., Chappelow, J., Zink, C. F., Pagnoni, G., Martin-Skurski, M. E., & Richards, J. 2005. Neurobiological Correlates of Social Conformity and Independence During Mental Rotation. *Biology Psychiatry*, 58, 245–253. doi: org/10.1016/j.biopsych.2005.04.012
- Birell, I. 2013, 01 27. (G. N. Limited, Producer) Retrieved 02 21, 2016, from theguardian.com: <http://www.theguardian.com/commentisfree/2013/jan/27/music-banned-mali>
- Bitgood, S. 2003. The Role of Attention in Designing Effective Interpretive labels. *Journal of Interpretation Research*, 5 (2), 31-45.
- Blakeslee, S., & Blakseele, M. 2007. *The Body Has a Mind of its Own*. New York: Random House.
- Blok, A. 1998. The narcissism of minor differences. *European Journal of Social Theory*, 1 (1), 35-56. doi: 10.1177/136843198001001004
- Blumer, H. 1986. Symbolic Interactionism: Perspective and Method. In A. M. Rose, *Human Behavior and Social Process: An Interactionist Approach*. University of California Press.
- Blundun, A. 2004, 08. *Amartya Sen on wellbeing and critical voice The Critique of Distributive Justice*. Retrieved 11 28, 2015, from <http://home.mira.net/~andy/works/sen-critical-voice.htm>
- Boedecker, J., Lampe, T., & Riedmiller, M. 2013. Modeling effects of intrinsic and extrinsic rewards on the competition between striatal learning systems. (M. Mirolli, Ed.) *Front. Psychol.* 16 (4). doi: 10.3389/fpsyg.2013.00739
- Boghossian, A. P. 2001, Feb. *What is Social Construction?* Retrieved March 4, 2016, from nyu.edu: <http://philosophy.fas.nyu.edu/docs/IO/1153/socialconstruction.pdf>

- Bogomolny, L. 2004, 10 04. *Live and learn: Joseph Rotman*. Retrieved 10 09, 2015, from canadianbusiness.com: <http://www.canadianbusiness.com/lifestyle/live-and-learn-joseph-rotman/>
- Boniwell, I. 2006. *Positive Psychology in a Nutshell: A Balanced Introduction to the Science of Optimal Functioning*. London: Personal Wellbeing Centre.
- Bostock, W. W. 1999. The Global Corporatisation of Universities: Causes and Consequences. *An Antipodean electronic journal of world affairs*, 1-24.
- Bovitch, S., Cullimore, Bramwell-Jones, Massas, & Perun. 2011, 04 30. *The Educational Theory of Noam Chomsky*. Retrieved 10 30, 2015, from New Foundations: <http://www.newfoundations.com/GALLERY/Chomsky.html>
- Brückner, M., & Lederman, D. 2015. *Effects of Income Inequality on Economic Growth*. World Bank Group. Office of the Chief Economist, Latin America and the Caribbean Region.
- Brabazon, T. 2015. *Unique Urbanity? Rethinking Third Tier Cities, Degeneration, Regeneration and Mobility*. Springer Singapore.
- Bradford, N. 1999. The Policy Influence of Economic Ideas: Interests, Institutions and Innovations in Canada. *Studies in Political Economy Summit*, 59, 17-60.
- Brem, J. W., & Self, E. E. 1989. The Intensity of Motivation. *Ann. Rev. Psychology*, 40, 109-31. doi: 10.1146/annurev.ps.40.020189.000545
- Brett, A., Smith, M., Price, E., & Huitt, W. 2003. *Overview of the Affective Domain*. Valdosta, GA: Valdosta State University.
- Bronsteen, J. 2014. Wellbeing and Public Policy. *Coase-Sandor Working Paper Series in Law and Economics*, 707, 1-28.
- Broom, C. 2012. Assessment and Evaluation: Exploring their Principles and Purposes in Relation to Neoliberalism through a Social Studies Case Study. *Canadian Social Studies*, 45 (02), 17-36.
- Brown, K., & Ryan, R. M. 2003. The Benefits of Being Present: Mindfulness and Its Role in Psychological Wellbeing. *Journal of Personality and Social Psychology*, 84 (4), 822-48. doi: 10.1037/0022-3514.84.4.822
- Brown, L. V. 2007. *Psychology of Motivation*. (L. V. Brown, Ed.) New York: Nova Science Publishers Inc.

- Brown, W. 2015. *Undoing the Demos: Neoliberalism's Stealth Revolution*. Brooklyn: MIT Press.
- Brownlee, J. 2016, 01. *The Role of Governments in Corporatizing Canadian Universities*. Retrieved 03 28, 2017, from Academic Matters: <http://www.academicmatters.ca/2016/01/the-role-of-governments-in-corporatizing-canadian-universities/>
- Brueckner, M., & Lederman, D. 2015. *Effects of Income Inequality on Aggregate Output*. World Bank Group, Office of the Chief Economist, Latin America and the Caribbean Region. World Bank Group.
- Bruner, E. M. 2001. The Maasai and the Lion King: Authenticity, Nationalism, and Globalization in African Tourism. *American Ethnologist*, 28 (04), 881-908. doi: 10.1525/ae.2001.28.4.881
- Brzeziński, Z. 1989. *The Grand Failure: The Birth and Death of Communism in the 20th Century*. New York: Scribner.
- Burnham, T., & Phelan, J. 2000. *Mean Genes; From Sex to Money to Food, Taming our Primal Instincts*. New York: Perseus Publishing.
- Butler-Bowden, T. 2015. *Psychology Classics*. Retrieved 10 28, 2015, from <http://www.butler-bowdon.com>: <http://www.butler-bowdon.com/abraham-maslow---motivation-and-personality.html>
- Cagle, S. 2013, 02 11. *Fallacy of the creative class: Why Richard Florida's 'urban renaissance' won't save U.S. cities*. Retrieved 10 05, 2015, from grist.org: <http://grist.org/cities/fallacy-of-the-creative-class/>
- Cain, S. 2013. *Quiet: The Power of Introverts in a World That Can't Stop Talking*. New York: Random House, Inc.
- Callen, T. 2012, 03 28. *Gross Domestic Product: An Economy's All*. Retrieved 06 14, 2016, from [imf.org](http://www.imf.org): <http://www.imf.org/external/pubs/ft/fandd/basics/gdp.htm>
- Campos, J., Mumme, D., Kermoian, R., & Campos, R. 1994. A functionalist perspective on the nature of emotion. In N. Fox (Ed.), *The Development of Emotion Regulation: Monographs of the Society for Research in Child Development* (Vol. 59, pp. 284–303). John Wiley & Sons.
- Cantril, H. 1942. Public Opinion in Flux. *The Annals of the American Academy of Political and Social Science*, 220, 136-52. doi: 10.1177/000271624222000115

- Carter, A. 2015, 05 15. *Report slams 'blended' learning at Mohawk, Ontario colleges.* (CBC/Radio-Canada, Producer) Retrieved 03 25, 2017 from CBC Hamilton: <http://www.cbc.ca/news/canada/hamilton/news/report-slams-blended-learning-at-mohawk-ontario-colleges-1.2644266>
- Carson, S. 2010. *Your Creative Brain: Seven Steps to Maximizing Imagination, Productivity, and Innovation in your life.* San Francisco: Jossey-Bass.
- Cassam, Q. 2005. *Self and World.* New York: Oxford University Press.
- CASSE. (n.d.). *GDP and Indicators of Economic Wellbeing.* Retrieved 06 14, 2016, from <http://steadystate.org>: http://steadystate.org/wp-content/uploads/CASSE_Brief_GDP.pdf
- Chang, B. 2014. Socio-Cultural Influences of Society on Knowledge Construction. *International Journal of Knowledge Management*, 10 (1), 78-91. doi: 10.4018/ijkm.2014010105
- Cingano, F. 2014. *Trends in Income Inequality and its Impact on Economic Growth.* Retrieved 10 09, 2015, from oecd.org: <http://www.oecd.org/els/soc/trends-in-income-inequality-and-its-impact-on-economic-growth-SEM-WP163.pdf>
- Cloninger, R., Svrakic, D. M., & Pryzbeck, T. R. 1993. Psychobiological Model of Temperament and Character. *Arch. Gen. Psychiatry*, 50 (12), 975-90. doi:10.1001/archpsyc
- Cohen, M. G. 2000. Rethinking Global Strategies. In McBride, & Wiseman, *Governing Under Stress: Middle Powers and the Challenge of Globalization.* London: Zed Books.
- Collaborative for Academic, Social, and Emotional Learning (CASEL). 2013. *Effective Social and Emotional Learning Programs.* Retrieved 06 06, 2016, from www.CASEL.org.
- Collingwood. 2015, 10 30. *Your Sense of Coherence.* (P. Central, Producer) Retrieved 06 15, 2016, from PsychCentral.com : <http://psychcentral.com/lib/your-sense-of-coherence/>
- Collins, A. 2014, July 22. *How playing an instrument benefits your brain.* (TED-ed, Producer) Retrieved from www.youtube.com: <https://www.youtube.com/watch?v=R0JKCYZ8hng>
- Commission on the Reform of Ontario's Public Services. 2012. *Public Services for Ontarians: A Path to Sustainability and Excellence.* Ontario: Queen's Printer for Ontario.

- Conference Board of Canada. 2008, 08. Retrieved 10 03, 2015, from gov.bc.ca:
http://www.cscd.gov.bc.ca/arts_culture/docs/aug2008_conference_board_of_canda_valuing_culture.pdf
- Conway, M. A. 2005. Memory and the self. *Journal of Memory and Language*, 53, 594-628.
 doi: 10.1155/2013/176027
- Coombe, R. J., & Weis, L. J. 2015. Neoliberalism, Heritage Regimes, and Cultural Rights. In L. Meskell (Ed.), *Global Heritage: A Reader* (First edition ed., pp. 43-69). Malden, MA: Wiley Blackwell.
- Coon, D. a. 2013. *Introduction to Psychology: Gateways to Mind and Behaviour: Gateways to mind* (14th ed. ed.). Boston, M.A: Cengage Learning.
- Costanza, R., Hart, M., Kewbiszewski, I., & Talberth, J. 2009. A Short History of GDP: Moving Towards Better Measures of Human Wellbeing. *The Pardee Papers*, 4.
- Costanza, R., Hart, M., Posner, S., & Talberth, J. 2009. *Beyond the GDP: The need for new measures of Progress*. Boston University: Boston University Creative Services.
- Crary, J. 2013. *24/7: Late Capitalisim and the ends of sleep*. New York:Verso.
- Crawford, M. 2015. *The World Beyond Your Head: On Becoming an Individual in an Age of Distraction*. Toronto: Penguin.
- CSDH. 2008. *Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health*. World Health Organization, Geneva.
- Csikszentmihalyi. 1991. *FLOW: The Psychology of Optimal Experience*. New York: Harper-Collins ebooks.
- Csikszentmihalyi, M. 1975. *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.
- Csikszentmihalyi, M. 1988. The flow experience and its significance for human psychology. In M. Csikszentmihalyi, & I. S. Csikszentmihalyi (Eds.), *Optimal experience: Psychological studies of flow in consciousness*: New York: Cambridge University Press.
- Currie, J. 1998. Globalization as an analytical concept and local policy responses. In J. Currie, & J. Newson (Eds.), *Universities and globalization: Critical perspectives* (pp. 15-21). Thousand Oaks, CA: Sage Inc.
- Dahl, S., & Friberg, A. 2007. What Can the Body Movements Reveal About a Musician's Emotional Intention? *Stockholm Music Acoustics Conference*, (pp. 599-602). Stockholm.

- Damasio, A. 2010. *Self Comes to Mind: Constructing the Conscious Brain*. Toronto: Random House.
- Davenport, T., & Prusak, L. 2005, 02 11. *Working Knowledge: How Organizations Manage What They Know*. Retrieved 12 12, 2015, from ACM: Ubiquity : http://www.kushima.org/is/wp-content/uploads/2013/09/Davenport_know.pdf
- Davidson, R. J., & Lutz, A. 2008. Buddha's Brain: Neuroplasticity and Meditation. *Signal Process Mag.* 25 (1), 176-84. doi:10.1109/MSP.2007.910429
- Davis, J. E. 2003. The Commodification of the Self. *The Hedgehog Review*, 5, (2), 41-8.
- Davis, M. 2006. *Planet of Slums*. London: Verso.
- Dawson, M. 2014. Degrees of embodiment. In L. Shapiro (Ed.), *The Routledge Handbook of Embodied Cognition*. London: Taylor & Francis Ltd.
- Deci, E. L. 1971. Effects of Externally Mediated Rewards on Intrinsic Motivation. *Journal of Personality and Social Psychology*, 18 (1), 105-15. doi: 10.1037/h0030644
- Deci, E. L., & Ryan, R. 1991. Motivational approach to self: Integration in personality. In D. R. (Ed.), *Nebraska symposium on motivation: Perspectives on motivation*. 38, pp. 237-288. Nebraska: The University of Nebraska Press.
- Deci, E. L., Koestner, R., & Ryan, R. M. 1999. A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125 (6), 627-68.
- Decortis, F., & Lentini, L. 2009, 05 13. A socio-cultural perspective of creativity for the design of educational environments. *eLearning Papers*, 1-10.
- Derakshan, N., & Eysenck, M. W. 2009. Anxiety, Processing Efficiency, and Cognitive Performance: New Developments from Attentional Control Theory. *European Psychologist*, 14 (02), 168-176. doi: 10.1027/1016-9040.14.2.168
- Diener, E. 2009. *Ed Diener*. (M. Chan, Producer, & Creative Commons) Retrieved 11 26, 2015, from illinois.edu: <http://internal.psychology.illinois.edu/~ediener/faq.html#SWB>
- Diener, E., & Suh, E. 1997. Measuring quality of life: Economic, social, and subjective indicators. *Social Indicators Research*, 40 (1-2), 189-216. doi: 10.1023/A: 1006859511756

- Diener, E., & Tay, L. 2013. Rising Income and the Subjective Wellbeing of Nations. *Journal of Personality and Social Psychology*, 104 (2), 267-76. doi: 10.1037/a0030487
- Dietrich, A. 2013, 08 13. *ICCC Keynote lecture: Arne Dietrich, The Mechanics of Thought Trials*. (D. a. The Faculty of Architecture, Producer) Retrieved 11 03, 2015, from youtube.com: <https://www.youtube.com/watch?v=pH9crjgJLjc>
- Dietrich, A. 2004. The cognitive neuroscience of creativity. *Psychonomic Bulletin & Review*, 11 (6), 1011-1026. doi: 10.3758/BF03196731
- Dissanayake, E. 2007. In the Beginning: Pleistocene and Infant Aesthetics and Twenty-First Century Education in the Arts. (L. Bressler, Ed.) *International Handbook of Research in Arts Education*, 2, 783-798.
- Dodge, R., Daly, A., Huyton, J., & Sanders, L. 2012. The challenge of defining wellbeing. *International Journal of Wellbeing*, 2 (3), 222-35. doi: 10.5502/ijw.v2i3.4
- Dolan, P., Layard, R., & Metcalf, R. 2011. *Measuring Subjective Wellbeing for Public Policy: Recommendations on Measures*. London School of Economics and Political Science. London: Centre for Economic Performance London School of Economics and Political Science.
- Donegan, M. K. 2006, 10 03. *Inequality in the Creative City: Is There a Place for "Old-Fashioned" Institutions?*. Retrieved 2015, from unc.edu: <https://cdr.lib.unc.edu/indexablecontent/uuid:a0f8a302-d8d9-4781-b8b4-c940572802d4>
- Dunbar, R. 2003. Social Network Size in Humans. *Human Nature*, 14 (1), 53-72. doi: 10.1007/s12110-003-1016-y
- Duncan, S., & Barrett, L. 2007. Affect is a form of cognition: A neurobiological analysis. *Cognition and Emotion*, 21 (06), 1184-1211. doi: 10.1080/02699930701437931
- Eagleton, T. 1991. *Ideology: An Introduction*. New York: Verso.
- Easterly, W. 2007. Inequality does cause underdevelopment: Insights from a new instrument. *Journal of Development Economics*, 8, 84, 755-76. doi: 10.1016/j.jdeveco.2006.11.002
- Edmunston, M. 2012, 07 20. *The Trouble With Online Learning*. Retrieved 09 13, 2013, from The NewYork times (Opinion Pages): http://www.nytimes.com/2013/02/19/opinion/the-trouble-with-online-college.html?_r=0

- Eede, J. 2011, 04 1. *Uncontacted Tribes: The Last Free People on Earth*. Retrieved 03 25, 2015, from nationalgeographic.com:
<http://voices.nationalgeographic.com/2011/04/01/uncontacted-tribes-the-last-free-people-on-earth/>
- Eisenberg, A. 2006. Reasoning about Identity: Canada's Distinctive Culture Test. In A. Eisenberg (Ed.), *Diversity and Equality: The Changing Framework of Freedom in Canada*. Vancouver: UBC Press.
- Eliasoph, N., & Lichterman, P. 2003. Culture in Interaction. *American Journal of Sociology*, 108 (4), 735-94. doi: 10.1086/367920
- Engall, A., & Keller, P. E. 2011. The Perception of Musical Spontaneity in Improvised and Imitated Jazz Performances. *Front Psychology*, 2 (83), 1-13.
doi.org/10.3389/fpsyg.2011.00083
- Enoch, S. 2007, 10 16. *Changing the Ideological Fabric? A Brief History of (Canadian) Neoliberalism*. *State of Nature*.
- Ericsson, A. K., Krampe, R. T., & Tesch-Römer, C. 1993. The Role of Deliberate Practice in the Acquisition of Expert Performance. *Psychological Review*, 100 (3), 363-406.
- Ericsson, A. K., Roring, R. W., & Nandagopal, K. 2007. Giftedness and evidence for reproducibly superior performance: an account based on the expert performance framework. *High Ability Studies*, 18 (1), 3-56.
 doi: 10.1080/13598130701350593
- Eriksson, M., & Lindstrom, B. 2005. Validity of Antonovsky's sense of coherence scale: a systematic review. *Journal of Epidemiology and Community Health*, 59, 460-66.
 doi:10.1016/j.sbspro.2010.07.306
- European Commission. 2009. *The Impact of Culture on Creativity*. Retrieved 12 06, 2013, from http://ec.europa.eu/culture/documents/study_impact_cult_creativity_06_09.pdf
- Eysenck, M. W., & Keane, M. T. 2005. *Cognitive Psychology: A Student's Handbook*. Retrieved 05 04, 2016, from psyppress.co: <http://www.psyppress.co.uk/ek5/resources/>
- Feldt, A. G. 1986. *General Systems Theory*. Retrieved 12 21, 2015, from [holisticwisdom.org: http://www.holisticwisdom.org/hwpages/chapt%20-%20-%20GST.htm](http://www.holisticwisdom.org/hwpages/chapt%20-%20-%20GST.htm)
- Ferguson, M. J., Hassin, R., & Bargh, J. A. 2008. Implicate Motivation: Past, Present, and Future. In J. Shah, & W. Gardner (Eds.), *Handbook on Motivation Science* (pp. 150-68). New York: Guilford.

- Ferguson, M., Hassan, R., & Bargh, J. (In press). Implicit Motivation, Past, Present, Future. In J. Shah, & W. Gardner (Eds.), *Handbook of Motivational Science*. New York: Guilford.
- Fessy, T. 2012, 12 06. *Blues for Mali as Ali Farka Toure's music is banned*. (BBC, Producer) Retrieved 02 21, 2016, from [bbc.com: http://www.bbc.com/news/world-africa-20624236](http://www.bbc.com/news/world-africa-20624236)
- Feyerabend, P. 2000. Against Method. In S. Rosen (Ed.), *The Philosopher's Handbook: Essential Readings from Plato to Kant* (pp. 493-502). New York: Random House, Inc.
- Fine, P. 2011, 01 09. *CANADA: Universities face many challenges*. Retrieved 11 20, 2015, from [universityworldnews.com: http://www.universityworldnews.com/article.php?story=20110107102948307](http://www.universityworldnews.com/article.php?story=20110107102948307)
- Fleming, T. 2006. Blood from a Stone: Institutional Barriers to Fostering Academic Freedom and Research in Ontario's Community Colleges. *The Innovation Journal, The Public Sector Innovation Journal*, 11 (3), 1-14.
- Fleuret, S., & Atkinson, S. 2007. Wellbeing, health and geography: A critical review and research agenda. *New Zealand Geographer*, 63, 106-18.
doi: 10.1111/j.1745-7939.2007.00093.x
- Florida, R. 2013, 01. *More losers than winners in America's new economic geography*. (T. Atlantic, Producer) Retrieved 10 03, 2015, from [www.theatlanticcities.com: http://www.theatlanticcities.com/jobs-and-economy/2013/01/more-losers-winners-americas-new-economic-geography/4465/](http://www.theatlanticcities.com/jobs-and-economy/2013/01/more-losers-winners-americas-new-economic-geography/4465/)
- Florida, R. 2002. *The Rise of the Creative Class*. NY: Basic Books.
- Florida, R., Mellander, C., & Stolarick, K. 2009. *Talent, Technology and Tolerance in Canadian Regional Development*. University of Toronto, Rotman School of Business. Toronto: Martin Prosperity Institute.
- Foucault, M. 2005. *The Hermeneutics of the Subject: Lectures at the Collège de France 1981--1982*. (F. Gros, Ed.) New York: Picador.
- Fox, K. 2008. Rethinking experience: What do we mean by this word "experience"? *Journal of Experiential Education*, 38 (1) 36-54
- Fraser, C. 1987. Social Psychology. In R. Gregory (Ed.), *The Oxford Companion to the Mind*. New York: Oxford University Press.
- Freire, P. 1970. *Pedagogy of the Oppressed*. New York: The Continuum Publishing Corporation.

- French, S. A. 1995. What is Social Memory? *Southern Cultures*, 2 (1), 9-18.
- Friedwald, W. 2012. *Stardust Melodies: The Biography of 12 of America's Most popular Songs*. Chicago, Illinois: Pantheon Books.
- Fromm, E. 1959. The Creative Attitude. In H. Anderson (Ed.), *Creativity and its Cultivation* (pp. 44-54). New York: Harper and Row.
- Fukuda-Parr, S. 2013. Human Rights and Politics in Development. In M. Goodhart (Ed.), *Human Rights: Politics and Practice*. Oxford: Oxford University Press.
- Gable, P. & Harmon-Jones, E. 2016. Assessing the Motivational Dimensional Model of Emotion - Cognition Interaction: Comment on Domachowska, Heitmann, Deutsch, et al., (2016). *Journal of Experimental Psychology*.
- Gable, P. A., Threadgill, H. A., & Adams, D. L. 2015, 10 15. Neural Activity Underlying Motor - Action Preparation and Cognitive Narrowing in Approach - Motivated Goal States. *Cognitive, Affective and Behavioural Neuroscience*. doi: 10.3758/s13415-015-0381-4
- Gable, P., & Hart, W. 2013. Motivating goal pursuit: The role of affect motivational intensity and activated goals. *Journal of Experimental Social Psychology*, 49 (5), 922-26. doi.org/10.1016/j.jesp.2013.05.002
- Gabora, L. 2011, 11 16. *Honing Theory: A complex systems inspired view of creativity*. (Simon Fraser University) Retrieved 11 14, 2015, from Cognitive Science: <http://www.sfu.ca/cognitive-science/defining-cognitive-science-series/dcs-archive/2011/fall/gabora-honing-theory-complex-systems-creativity.html>
- Gabora, L. 2010. Recognizability of Individual Creative Style Within and Across Domains: Preliminary Studies. *Proceedings of the Annual Meeting of the Cognitive Science Society* (pp. 1-6). Vancouver: University of British Columbia.
- Galabuzi, G. E., Casipullai, A., & Go, A. 2012, 03 10. *The Persistence of Racial Inequality in Canada*. (T. S. Ltd, Producer) Retrieved 05 23, 2016, from thestar.com: https://www.thestar.com/opinion/editorialopinion/2012/03/20/the_persistence_of_racial_inequality_in_canada.html
- Gallagher, M. 2015, 03 23. *Bullshit Jobs in the Creative Industries*. (U. of. Department of Communication Arts, Producer) Retrieved 11 21, 2015, from Antena: <http://blog.commarts.wisc.edu/2015/04/23/bullshit-jobs-in-the-creative-industries/>

- Gard, T., Noggle, J. J., Park, C. L., Vago, D. R., & Wilson, A. 2014. Potential self-regulatory mechanisms of yoga for psychological health. (L. Schmalzl, Ed.) *Frontiers in Human Neuroscience*, 8 (770). doi.org/10.3389/fnhum.2014.00770
- Gauntlette, D. B. 2013. *Cultures of Creativity; Nurturing Creative Mindsets Across Cultures*. LEGO Foundation.
- Giddens, A. 1976. *New Rules of Sociological Method*. London: Hutchinson.
- Gilbert, C. D., Das, A., Ito, M., Kapadia, M., & Westheimer, G. 1996. Spatial Integration and Cortical Dynamics. *Proc. Natl. Acad. Sci. USA*, 93, 615-622.
- Gilbert, P. 2009. Introducing compassion-focused therapy. *Advances in psychiatric treatment*, 15, 199-208. doi: 10.1192/apt.bp.107.005264
- Gillett, J., Andrews, G. J., & Savelli, M. 2016. *Health and Society: Critical Perspectives*. Don Mills, Ontario: Oxford University Press.
- Giroux, H. A. 2011. *On Critical Pedagogy*. New York: Bloomsbury Publishing Inc.
- Glaser, B. G. 2012. Constructivist Grounded Theory? *The Grounded Theory Review*, 11 (1), 28-38.
- Global Health Watch. 2008. *Global Health Watch 2; An Alternative World Health Report*. (D. McCoy, A. Ntuli, & D. Sanders, Eds.) New York: Zed Books Ltd.
- Godwin, A. I., & Uduak, B. E. 2013. Influence of Learning Styles and Teaching Strategies on Students' Achievement in Biology. *Voice of Research*, 1 (04), 5-13.
- Goudreau, G., Weber-Pillwax, C., Cote-Meek, S., & Madill, H. 2008, January. Hand Drumming: Health-Promoting Experiences of Aboriginal Women from a Northern Ontario Urban Community. *Journal de la santé autochtone*, 72-83.
- Government of Nova Scotia. 2015. *Creative Economy*. Retrieved 10 04, 2015, from novascotia.ca: http://www.novascotia.ca/finance/site-finance/media/finance/budget2015/Creative_Economy_Bulletin.pdf
- Government of Yukon Department of Economic Development. 2014. *Building on Yukon's Creative Economy; A 4T Benchmarking and Occupational Analysis for Whitehorse and Yukon*. (C. C. Group, Producer) Retrieved 10 04, 2015, from gov.yk.ca: http://www.economicdevelopment.gov.yk.ca/fr/pdf/CCG_Yukon_4T_Benchmarking_Report_Final.pdf

- Grace, G. 1991. Welfare Labourism versus the New Right; the Struggle in New Zealand's Education Policy. *International Studies of Sociology of Education, Vol.1 no 1*. doi.org/10.4135/9781446221457
- Gramsci, A. 1971. *Selections from the Prison Notebooks of Antonio Gramsci*. New York: International Publishers.
- Graves, J. B. 2005. *Cultural Democracy: the Arts, Community and the Public Purpose*. Illinois: University of Illinois Press.
- Guilford, J. 1950. Creativity. *American Psychologist, 5 (9)*, 444-54.
- Halbwachs, M. 1992. *On collective memory*. (L. Coser, Ed.) Chicago: University of Chicago Press.
- Hamann, T. H. 2009. Neoliberalism, governmentality, and ethics. *Foucault Studies, 6*, 37-59.
- Hansjörg, H. 1996. Opplevelse som erkjennelsesform. *Norsk pedagogisk tidsskrift, 5*, 280- 288.
- Harmon-Jones, E., Gable, P. A., & Price, T. F. 2012. The influence of affective states varying in motivational intensity on cognitive scope. *Frontiers in Integrative Neuroscience, 6*, 1-5. doi.org/10.3389/fnint.2012.00073
- Harmon-Jones, E., Harmon-Jones, C., Amodio, D. M., & Gable, P. A. 2011. Attitude toward emotions. *Journal of Personality and Social Psychology, 101 (6)*, 1332-1350. doi: 10.1037/a0024951
- Harris, D. V. 1973. *Involvement in sport: A somatopsychic rationale for physical activity*. Philadelphia: Lea & Febiger.
- Harvey, D. 2005. *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Hassed, C. 2002. *Know Thyself: The stress release programme*. Melbourne: Michelle Andersen Publishing.
- Hayden, B. Y., & Platt, M. L. 2010. Neurons in Anterior Cingulate Cortex Multiplex Information about Reward and Action. *The Journal of Neuroscience, 30 (9)*, 3339 –3346. doi: 10.1523/JNEUROSCI.4874-09.2010
- Hayes, S. C. 1994. Content, context, and the types of psychological acceptance. In S. Hayes, N. Jacobson, V. Follette, & M. Dougher (Eds.). Reno, NV: Context Press.
- Hedlund, J., Onakis, J., & Sternberg, R. J. 2002. *Tacit Knowledge and Practical Intelligence: Understanding the Lessons of Experience*. United States Army Research Institute for the Behavioral and Social Sciences, Yale.

- Hefferon, K. 2013. *A brief introduction to positive psychology; the Somatopsychic Side to Flourishing*. New York: Open University Press.
- Hesmondhalgh, D. 2007. *The Creative Industries. 2nd Ed.* London: Sage.
- Hoefnagles, A. 2012. One Strong Woman: Finding Her Voice, Finding Her Heritage. In A. Hoefnagles, & B. Diamond (Eds.), *Aboriginal Music in Contemporary Canada: Echoes and Exchange* (pp. 194-205). Montreal : McGill-Queen's University Press.
- Hofstadter, D. R. 1979. *Gödel, Escher, Bach: an Eternal Golden Braid*. New York: Basic Books Inc.
- Holder, C. 2006. Culture as a Basic Human Right. In D. a. Equality, & A. Eisenberg (Ed.). Vancouver: UBC Press.
- Hood, B. 2012. *The Self Illusion: How the Social Brain Creates Identity*. Toronto: HarperCollins Publishers Ltd.
- Horowitz, S. 2012. *The Universal Sense: How Hearing Shapes the World*. New York: Bloomsbury.
- Hudson, J. 2006, 06. *Inequality and the Knowledge Economy: Running to Stand Still*. Retrieved 10 10, 2015, from researchgate.net: http://www.researchgate.net/publication/33042377_Inequality_and_the_Knowledge_Economy_Running_to_Stand_Still
- Industry Canada. 2001. *Achieving Excellence: Investing in People, Knowledge and Opportunity*. Industry Canada, Government of Canada. Industry Canada.
- Inglehart, R., & Welzel, C. 2005. *Modernization, Cultural Change, and Democracy: The Human Development Sequence*. New York: Cambridge University Press.
- Isaksen, S., & Trefflinger, D. 1985. *Creative Problem Solving: The Basic Course*. Buffalo: Bearly Publishing.
- Ivey, B. 2009. Expressive Life and the Public Interest. (S. E. Jones, Ed.) *Expressive Lives* (27), 23-34. London: Demos.
- Jackson, P. 2003. *Maps of Meaning: An Introduction to Cultural Geography*. New York: Routledge.
- Jackson, T. 2013, 01 17. *New economic model needed not relentless consumer demand*. Retrieved 10 16, 2015, from theguardian.com: <http://www.theguardian.com/sustainable-business/blog/new-economic-model-not-consumer-demand-capitalism>

- Jackson, T. 2009. *Prosperity without Growth: Economics for a Finite Planet*. New York: Earthscan.
- James, W. 1890. *The Principles of Psychology*. New York: Holt.
- Jazz Times. 2016, 01 18. *Dr. Martin Luther King, Jr. from 1964 Berlin Jazz Festival Program Dr. Martin Luther King, Jr. reflects on legacy of jazz*. (I. JazzTimes, Producer) Retrieved 02 28, 2016, from <http://jazztimes.com/>: <http://jazztimes.com/articles/24223-dr-martin-luther-king-jr-from-1964-berlin-jazz-festival-program>
- Jean-Benghozi, P. 2003, 07. *Economy and Culture: Looking for Public Regulation Issues*. Retrieved 06 25, 2016, from globalpolicy.org: <https://www.globalpolicy.org/component/content/article/162-general/27620.html>
- Jenkins, H. 2009. *Confronting the Challenges of a Participatory Culture: Media Education for the 21st Century*. T. MacArthur Foundation. Cambridge: MIT Press.
- Jeppsen, S., & Nazar, H. 2012. Beyond Academic Freedom: Canadian Neoliberal Universities in the Global Context. *Topia Journals* (12), 87-113.
- Juárez, A. M. 2002. Ecological Degradation, Global Tourism, and Inequality: Maya Interpretations of the Changing Environment in Quintana Roo, Mexico. *Human Organization*, 61 (02). doi.org/10.17730/humo.61.2.dbyeyrdgcc0c5kga
- Juslin, P. N., & Sloboda, J. A. 2001. *Music and Emotion*. (P. N. Juslin, & S. J. A., Eds.) New York: Oxford University Press.
- Kabat-Zinn, J. 1994. *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
- Kanske, P. 2012. On the Influence of Emotion on Conflict Processing. *Front. Integr. Neurosci.* 6 (42), 1-4. doi.org/10.3389/fnint.2012.00042
- Kaplan, R. L., Van Damme, I., & Levine, L. J. 2012. Motivation Matters: Differing Effects of Pre-Goal and Post-Goal Emotions on Attention and Memory. *Frontiers in Psychology*. 3 (404). doi: 10.3389/fpsyg.2012.00404
- Kasser, T. R., Sameroff, K. L., Deci, A., Niemiec, E. L., Ryan, C. P., Árnadóttir, R. M., et al. 2013. Changes in Materialism, Changes in Psychological Wellbeing: Evidence From Three Longitudinal Studies and an Intervention Experiment. *Motivation and Emotion*, 38 (1), 1-22. doi:10.1007/s11031-013-9371-4

- Kasser, T. T. 2009. *Meeting environmental challenges; the role of human identity*. Retrieved 01 05, 2015, from bsl.org:
http://library.bsl.org.au/jspui/bitstream/1/2159/1/meeting_environmental_challenges.pdf
- Kaufman, J., & Beghetto, R. 2009, March. Beyond Big and Little: The Four C Model of Creativity. *Review of General Psychology*, 1-12. doi: 10.1037/a0013688
- Kehr, H. M. 2004. Integrating Implicit Motives, Explicit Motives, And Percieved Abilities, The Compensatory Model of Work , Motivation, and Volition. *Academy of Management Review*, 29 (3), 479-99. doi: 10.5465/AMR.2004.13670963
- Kellman, P., & Massey, C. 2013. Perceptual Learning, Cognition, and Expertise. In B. S. Ross (Ed.), *The Psychology of Learning and Motivation* (Vol. 58, pp. 117-66). New York: Elsevier Inc.
- Kennedy, R. F. 1968, 03 18. Retrieved 06 14, 2016, from americanprogress.org:
<http://images2.americanprogress.org/campus/email/RobertFKennedyUniversityofKansas.pdf>
- Khatena, J., & Torrence, E. 1973. *Thinking Creatively with Sounds and Words: Technical Manual (Research Ed.)*. Lexington, MA: Personal Press.
- Kilbourne. 2006. Jesus is a brand of jeans. *New Internationalist Magazine* (363).
- Kleiman, Paul. 2008. Towards transformation: conceptions of creativity in higher education, *Innovations in Education and Teaching International*, 45: 3, 209— 217
- Klein, D. B., & Romero, P. P. 2007, May 2. Model Building Versus Theorizing: The Paucity of Theory in the *Journal of Economic Theory*. *Econ Journal Watch*, 4 (2), 241-271.
- Klinenberg, E. 2013, 01 03. *Neighborhood Connections Key to Surviving a Crisis*. Retrieved 10 08, 2015, from npr.org:
<http://www.npr.org/2013/01/03/168509385/neighborhood-connections-key-to-surviving-a-crisis>
- Kornfield, J. 2009. *The Wise Heart: A Guide to the Universal Teachings of Buddhist Psychology*. New York: Bantam Books.
- Langer, E. 1989. *Mindfulness*. Boston: Da Capo Press.
- Langlois, A. 2013. Normative and Theoretical Foundations of Human Rights. In M. Goodhart (Ed.), *Human Rights: Politics and Practice* (Vol. 2, pp. 11-26). Oxford: Oxford University Press.

- Laricchiuta, D., & Petrosini, L. 2014. Individual differences in response to positive and negative stimuli: endocannabinoid-based insight on approach and avoidance behaviors. *Frontiers in Systems Neuroscience*, 8 (238).
<http://dx.doi.org/10.3389/fnsys.2014.00238>
- Larner, W. 2000. Neo-liberalism: Policy, ideology, governmentality. *Studies in Political Economy*, 63, 5-26.
- Larsson, J., Andersson, D., Holmberg, J., & Jonas. 2013. *Temporal wellbeing: A central dimension of sustainable lifestyles?* Chalmers University of Technology, Department of Energy and Environment. Chalmers University of Technology.
- Lasch, C. 1979. *Culture of Narcissism: American Life in an age of Diminishing Expectations*. New York: Norton Pub.
- Lash, J. 2001. Dealing with the Tinder As Well As the Flint. *Science*, 294 (5548), 1789.
 doi: 10.1126/science.294.5548.1789
- Laszlo, A., & Krippner, S. 1998. Systems Theories: Their Origins, Foundations, and Development. In J. Jordan (Ed.), *Systems Theories and A Priori Aspects of Perception* (pp. 47-74). Amsterdam: Elsevier Science.
- Lavezzoli, P. 2007. *The Dawn of Indian Music in the West*. New York: The Continuum International Publishing Group.
- Lazarus, R. S. 1991. *Emotion and Adaptation*. New York: Oxford University Press.
- Le Foll, D., & Rasclé, O. 2006. Persistence in a Putting Task During Perceived Failure: Influence of State-attributions and Attributional Style. *Applied Psychology: An International Review*, 55 (04), 586-605.
 doi: 10.1111/j.1464-0597.2006.00249.x
- Lebon, T. 2014. *Achieve your Potential with Positive Psychology*. London: Hodder & Stoughton Ltd.
- Ledford, G., Gerhart, B., & Fang, M. 2013. Negative Effects of Extrinsic Rewards on Intrinsic Motivation: More Smoke Than Fire. *World at Work Journal*, 17-29.
- Lee, J. (n.d.). *Chapter 8. GDP: Measuring Total Production and Income*. Retrieved 06 14, 2016, from tamu.edu: <http://econweb.tamu.edu/jinkooklee/econ203/Chapter8.pdf>
- Lee, M., & Friedrich, T. 2008. The History of UNESCO's Lifelong Learning Policy Discourses: A Enduring Social Democratic Liberalist Project of Global Educational Developmen. *Adult Education Research Conference. Paper 42*. New Prairie Press.

- Leistyna, P., & Sherblom, S. 1995, 07. A Dialogue with Noam Chomsky. *Harvard Educational Review*, 65 (02), pp. 127-45.
- Levin, R. 1997. *A Geography of Time: the temporal misadventures of a social psychologist*. New York: Basic Books.
- Levitin, D. J. 2007. *This is Your Brain on Music: The Science of a Human Obsession*. Toronto: Plume.
- Lewis, R. 2013, 08 21. *Ottawa Ranks #1 in World for Creative Economy*. (Techvibes, Producer) Retrieved 10 04, 2015, from techvibes.com: <http://www.techvibes.com/blog/ottawa-ranks-1-in-world-for-creative-economy-2013-08-21>
- Liberante, L., 2012. The Importance of Teacher-Student Relationships, as Explored through the Lens of the NSW Quality Teaching Model. *Journal of Student Engagement: Education Matters*, 2(1), 2-9.
- Libet, B. 1999. Do we Have Free Will? *Journal of Consciousness Studies*, 6 (8-9), 47-57.
- Limb, C. J., & Braun, A. R. 2008, 02 27. *Neural Substrates of Spontaneous Musical Performance: An fMRI Study of Jazz Improvisation*. (U. o. Ernest Greene, Ed.) Retrieved 10 28, 2015, from plos.org: PLoS ONE 3(2): e1679. doi:10.1371/journal.pone.0001679
- Littleton, C. 2005. *New Dictionary of the History of Ideas*. (T. G. Inc., Producer) Retrieved 01 03, 2016, from encyclopedia.com: <http://www.encyclopedia.com/topic/Syncretism.aspx>
- Locke, E. A., & Latham, G. P. 2006. New Directions in Goal-Setting Theory. *Current Directions in Psychological Science*, 15 (5), 265-8. doi: 10.1111/j.1467-8721.2006.00449.x
- Lovink, G. N. 2007. *My Creativity Reader; A critique of Creative Industries*. (G. N. Lovink, Ed. Retrieved from networkcultures.org: http://www.networkcultures.org/_uploads/32.pdf
- López-González, M., & Limb, C. J. 2012, 01-02. Musical Creativity and the Brain. *Cerebrum: the Dana Forum on Brain Science*. doi: 10.1371/journal.pone.0001679
- Luszczynska, A., Diehl, M., Gutierrez-Dona, B., Kuusinen, P., & Schwarzer, R. 2006. Measuring One Component of Dispositional Self-regulation: Attention Control in Goal Pursuit. *Journal of Personality Assessment*, 86 (3), 306-17. http://dx.doi.org/10.1207/s15327752jpa8603_06

- Lyubomirsky, S., Layous, K., Chancellor, J., & Nelson, K. 2015, 11. Thinking About Rumination: The Scholarly Contributions and Intellectual Legacy of Susan Nolen-Hoeksema. *Annual Review of Clinical Psychology*, 1-22.
doi: 10.1146/annurev-clinpsy-032814-112733
- MacGregor Wise, J. 2009. *Cultural Globalization: A User's Guide*. Blackwell Publishing.
- MacGregor Wise, J. 1997. *Exploring Technology and Social Space*. London: Sage Publications.
- MacKay, P. 2014. *Report on Education in Ontario Colleges*. OPSEU Communications.
- Manitoba Government. 2015. *Manitoba Business Facts*. Retrieved 10 04, 2015, from gov.mb.ca: http://www.gov.mb.ca/jec/invest/busfacts/economy/priv_invest.html
- Mankiw, G. N. 2015. *Principles of Economics, 7th ed.* Stamford, CT: Cengage Learning.
- Manley, J. 1999, 02 18. *The Empire Club of Canada Addresses*. Toronto, Canada. (394-404).
- Mann, T., Fujita, K., & de Ridder, D. 2013. Self-Regulation of Health Behavior: Social Psychological Approaches to Goal Setting and Goal Striving. *Health Psychology*, 32 (05), 487-98.
- Marcus, G., & Michael, M. F. 1986. *Anthropology as Culture Critique*. Chicago: Chicago University Press.
- Martin, R. L., & Florida, R. 2009, 02. *Ontario in the Creative Age*. Retrieved from <http://martinprosperity.org>:
<http://martinprosperity.org/media/pdfs/MPI%20Ontario%20Report%202009%20v3.pdf>
- Marwick, A. E. 2013. *Status Update: Celebrity, Publicity, and Branding in the Social Media Age*. London: Yale University Press.
- Maslow, A. H. 1943. A Theory of Human Motivation. *Psychological Review*, 50 (4), 370-96.
doi: 10.12691/jfs-3-4-2
- Maslow, A. H. 1993. *The Farther Reaches Of Human Nature*. New York: Penguin.
- Maslow, A. H. 1970. *Religions, Values, and Peak Experiences*. New York: Penguin Books Ltd.
- McBride, S. 2005. *Paradigm Shift: Globalization and the Canadian State* (Second ed.). Black Point, Nova Scotia: Fernwood Publishing.
- McClelland, D. C. 1987. *Human Motivation*. New York: Cambridge University Press.

- McDonald, C. J. 2009. Anywhere but Here: Rush and Suburban Desires for Escape. In C. J. McDonald, *Rush, Rock Music, and the Middle Class: Dreaming in Middletown (Profiles in Popular Music)* (pp. 27-61). Bloomington, IN: University Press.
- McGilchrist, I. 2009. *The Master and His Emissary*. Yale University Press.
TED Conferences, L. (Producer). (2013). *The Divided Brain* [Motion Picture].
- McLeod, J. 2015. Why and How Inequality Matters. *Journal of Health and Social Behaviour*, 56 (2) 149-65. American Psychological Association.
DOI: 10.1177/0022146515581619
- McMaster University and Mohawk College. 2011. *Building Successful College-University Partnerships*. McMaster University, Office of the Provost & Vice President (Academic), Hamilton, ON.
- McRanor, S. 2006. The Imperative of "Culture" In a Colonial and de facto Polity. In A. Eisenberg (Ed.). Vancouver: UBC Press.
- Mead, G. H. 1934. *Mind, Self, Society*. Chicago, IL: University of Chicago Press. Ltd.
- Merriam-Webster. n.d.. *Resilience*. Retrieved 06 30, 2016, from Merriam-Webster.com: <http://www.merriam-webster.com/dictionary/resilience>
- Merriam-Webster. 2015. *Utilitarianism*. (I. Merriam-Webster, Producer) Retrieved 11 28, 2015, from merriam-webster.com: <http://www.merriam-webster.com/dictionary/utilitarianism>
- Mestrovic, S. 1998. *Anthony Giddens: The Last Modernist*. London: Sage.
- Meyer, L. 1956. *Emotion and Meaning in Music*. Chicago: University of Chicago Press.
- Meyer, I. 1989. *Style and Music: Theory, History, and Ideology*. Philadelphia, PA: University of Pennsylvania Press.
- Miklós, A., & van den Bergh, J. 2014. *Macroeconomics, Financial Crisis and the Environment Strategies for a Sustainability Transition*. Österreichisches Institut für Wirtschaftsforschung. Österreichisches Institut für Wirtschaftsforschung.
- Minar, D. M. 1961. Ideology and Political Behavior. *Midwest Journal of Political Science*, 5 (4), 317-31.
- Mintzberg, H., Duru, R., & Theoret, A. 1976. The Structure of Unstructured Decision Processes. *Administrative Science Quarterly*, 21 (2), 246-247.

- Misztal, B. A. 2005. Memory and Democracy. *American Behavioural Scientist*, 48 (10), 1320-38. doi: 10.1177/0002764205277011
- Moran, S., & John-Steiner, V. 2003. Creativity in the Making: Vygotsky's Contemporary Contribution to the Dialectic of Creativity & Development. In *Creativity and Development* (pp. 61-105). Sawyer, K. (Ed.). New York: Oxford University Press.
- Morrow, R. A. 2006. Critical theory, globalization, and higher education: Political economy and the cul-de-sac of the postmodernist cultural turn. In R. Rhoades, & C. A. Torres (Eds.), *The university, state, and market: The political economy of globalization in the Americas* (pp. xvii - xxxiii). Stanford, CA: Stanford University Press.
- Moustakas, C. 1990. *Heuristic Research : Design, Methodology, and Applications*. London: Sage Publications Inc.
- Naito, K., & Nishida, K. 2012, 02. The Effects of Income Inequality on Education Policy and Economic Growth. *Theoretical Economics Letters*, 109-13. <http://dx.doi.org/10.4236/tel.2012.21020>
- Nevid, J. S. 2013. Motivation: The "Whys" of Behavior. 4th edition, *Psychology: Concepts and Applications* (pp. 288-97). Belmont, CA: Cengage Learning, Inc.
- New Brunswick New Democrats. 2014, 09 11. *NDP lays out plan for a creative economy*. Retrieved 10 04, 2015, from nbndp.ca: <http://www.nbndp.ca/ndp-lays-out-plan-for-a-creative-economy/>
- Niemiec, C. P., & Ryan, R. M. 2009. Autonomy, competence, and relatedness in the classroom Applying self-determination theory to educational practice. *Theory and Research in Education*, 7 (2), 133-144. doi: 10.1177/1477878509104318
- Noe, A. 2015. *Tools, Strange; Nature, Art and Human*. N.Y: Hill and Wang.
- Noe, A., & O'Regan, K. J. 2001. A sensorimotor account of Vision and Visiul Consciousness. *Behavioral and Brain Sciences*, 24 (5), 939-73. <http://dx.doi.org/10.1017/S0140525X01000115>
- Odena, O. 2012. *Musical Creativity*. Surrey, U.K: Ashgate.
- Olmos, L., Torres, C. A., & Van Heertum, R. 2011. *Educating the global citizen in the shadow of neoliberalism: thirty years of educational reform in North America*. Oak Park: Bentham ebooks.

- O'Neill Marketing and Consulting. 2015. *National Aboriginal Tourism Research Project 2015: Economic Impact of National Aboriginal Tourism in Canada*. Aboriginal Tourist Association of Canada. Ottawa: Aboriginal and Northern Development Canada.
- Ontario Ministry of Tourism and Culture. 2010. *Ontario's Entertainment & Creative Cluster; A framework for growth*. Retrieved 10 03, 2015, from gov.on.ca: http://www.mtc.gov.on.ca/en/publications/Creative_Cluster_Report.pdf
- O'Regan, T. 2001. *Cultural Policy: Rejuvenate or Wither*. Griffith University.
- Osborne. 1963. *Applied imagination: Principles and procedures of creative problem-solving* (3rd ed.). New York: Scribner's Sons Ltd.
- Panskeep, J. 2005. Affective consciousness: Core emotional feelings in animals and humans. *Consciousness and Cognition*, 14, 30-80.
doi:10.1016/j.concog.2004.10.004
- Panskeep, J. 1988. *Affective Neuroscience: The Foundations of Human and Animal Emotions*. New York: Oxford University Press.
- Parker, A. 2010. 'Time Past': the value of remembrance in aesthetic experience. In B. N. Townley (Ed.), *Managing Creativity: Exploring the Paradox* (pp. 310-21). New York: Cambridge University Press.
- Partnership for 21st Century Skills. 2016. *Our Vision and Mission*. (P. f. Skills, Producer, & Partnership for 21st Century Skills) Retrieved 07 30, 2016, from p21.org: <http://www.p21.org/about-us/our-mission>
- Pasquinelli, M. 2007. ICW-Immaterial Civil War; Prototypes of Conflict within Cognitive Capitalism. *My Creative Reader*, pp.71-81. Amsterdam: Institute of Network Cultures.
- Pattanaik, P. K. 1997. *Cultural Indicators of Wellbeing; Some Conceptual Issues*. Paris: UNESCO.
- Pea, Roy, et al. 1999. Toward a Learning Technologies Knowledge Network. *47* (2), 19-38.
- Pearlin, L. 1999. The Stress Process Revisited: Reflections on Concepts and Their Interrelationships. *The Handbook of the Sociology of Mental Health*. Aneshensel, C.S. and Phelean, J. C. (eds,). New York: Kluwer Academic Publishers.
- Peters, T. 1997, aug/sept. *The Brand Called You Big companies understand the importance of brands. Today, in the Age of the Individual, you have to be your own brand. Here's what it takes to be the CEO of Me Inc.* (Fast Company & Inc © 2015 Mansueto Ventures) Retrieved 11 20, 2015, from Fast Company: <http://www.fastcompany.com/28905/brand-called-you>

- Phillips, A. 1991. *Engendering Democracy*. University Park, PA: Pennsylvania State University Press.
- Pieter-Jan, M., Van Dyck, E., Lesaffre, M., Leman, M., & Kroonenberg, P. M. 2014. The Coupling of Action and Perception in Musical Meaning Formation. *Music Perception: An Interdisciplinary Journal*, 32 (1), 67-84.
doi: 10.1525/mp.2014.32.1.67
- Pinciotti, P., Gorton, R., & Brown, J. 2009. *Art as a Way of Learning: Designing and Assessing Aesthetic Learning Environments*. Northampton Community College. Northampton: Northampton Community College.
- Pink, D. 2009. *Drive: The Surprising Truth About What Motivates Us*. New York: Riverhead Books.
- Pink, D. 2009, 4 13. *The Puzzle of Motivation*. (TED Conferences) Retrieved 07 23, 2014, from TED: http://www.ted.com/talks/dan_pink_on_motivation.html
- Pollard, E., & Lee, P. 2003. Child wellbeing: a systematic review of the literature. *Social Indicators Research*, 61 (1), 9-78. doi: 10.1023/A:1021284215801
- Posner, J., Russell, J. A., & Peterson, B. S. 2005. The circumplex model of affect: An integrative approach to affective neuroscience, cognitive development, and psychopathology. *Development and Psychopathology*, 17 (3), 715-35.
doi: 10.1017/S0954579405050340
- Powell, A. R. 2012, 12 20. *What are Negative and Positive Liberty? And Why does it Matter?* (Cato Institute) Retrieved 11 27, 2015, from Libertarianism.org: <http://www.libertarianism.org/blog/what-are-negative-positive-liberty-why-does-it-matter#.cfbxu9x:wJCM>
- Pressing, J. 1998. Psychological Constraints on Improvisational Expertise and Communication. In B. Nettle, & M. Russell (Eds.), *In the Course of Performance* (pp. 47-68). Chicago, Il.: University of Chicago Press.
- Prinz, J. 2004. Embodied Emotions. In R. Solomon (Ed.), *Thinking about Feeling: Contemporary Philosophers on Emotion*. New York: Oxford University Press, Inc.
- Psychology Dictionary. 2015. *What is Motivation?* Retrieved 09 08, 2015, from Psychology Dictionary: <http://psychologydictionary.org/motivation/>
- Psychology Dictionary. 2016. *What is Persistence?* Retrieved 01 10, 2016, from Psychology Dictionary: <http://psychologydictionary.org/persistence/>

- Ramachandran, V. 2011. *The Tell-Tale Brain: A Neuroscientist's Quest for What Makes Us Human*. New York: W.W Norton & Company.
- Ravelli, B., Webber, M., & Patterson, J. 2011. *Sociology for Everyone*. Toronto: Pearson Canada, Inc.
- Rees, W. E. 2011. Foreward. In L. Westra, *Human Rights: The Commons and the Collective* (pp. xi-xxi). Vancouver: UBC Press.
- Reimer, B. 1970. *A Philosophy of Music Education*. Englewood Cliffs, NJ: Prentice Hall Inc.
- Rhodes, M. 1961. An Analysis of Creativity. *The Phi Delta Kappa*, 42, 305-10.
- Richards, D. L., & Gelleny, R. D. 2013. Economic Globalization and Human Rights. In M. Goodhart (Ed.), *Human Rights: 2nd Edition*. Oxford: Oxford University Press.
- Robertson, H.-j., McGrane, D., & Shaker, E. 2003. *For Cash and Future Considerations: Ontario Universities and Public-Private Partnerships*. Canadian Centre for Policy Alternatives, National Office. Ottawa: Canadian Centre for Policy Alternatives.
- Roemmich, J., Lambiase, M., McCarthy, T., Feda, D. M., & Kozlowski, K. 2012. Autonomy supportive environments and mastery as basic factors to motivate physical activity in children: a controlled laboratory study. *International Journal of Behavioral Nutrition and Physical Activity*, 9 (16).
- Rogers, C. R. 1961. *On Becoming a Person: a therapist's view on psychotherapy*. Boston: Houghton Mifflin Co.
- Rogers, C. 1959. Towards a Theory of Creativity. In H. Anderson (Ed.), *Creativity and its Cultivation* (pp. 69-82). New York: Harper.
- Romich, P. 2012. *Hybrid space counter-strategies Rebalancing our relationships with networked technologies*. Masters Thesis, Malmo University, Interaction Design.
- Rosch, E., Thompson, E., & Varela, F. J. 1993. *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, MASS: MIT Press.
- Rosenbaum, R., & Magid, B. (2006). *What's Wrong With Mindfulness: and what isn't*. Somerville, MA: Wisdom Publications Inc.
- Roszak, T. 2003. *Person/Planet: The Creative Disintegration of Industrial Society*. Lincoln, NE: iUniverse, Inc.

- Rothbart, M., Bates, J. 2006. Temperment. In N. Eisenberg, W. Damon, & L. M. Richard (Eds.), *Handbook of child psychology: Vol. 3, Social, emotional, and personality development (6th ed.)* (pp. 99-166). Hoboken, NJ: John Wiley & Sons Inc.
- Russell, J. A. 2003. Core Affect and the Psychological Construction of Emotion. *Psychological Review*, 110 (1), 145-72. doi: 10.1037/0033-295X.110.1.145
- Ryan, R. M., Kuhl, J., & Deci, E. L. 1997. Nature and autonomy: An organizational view of social and neurobiological aspects of self- regulation in behavior and development. *Development and Psychopathology*, 9, 701-728.
- Ryan, R. 2009, 6. *Self Determination Theory and Wellbeing: Wellbeing in Developing Countries*. Retrieved 10 13, 2013, from welldev.org.uk:
http://www.welldev.org.uk/wed-new/network/researchreview/Review_1_Ryan.pdf
- Ryan, R., & Deci, E. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American Psychologist*, 55 (1), 68-78. doi: 10.1037/110003-066X.55.1.68
- Ryff, C. D. 1989. Happiness Is Everything, or Is It ? Explorations on the Meaning of Psychological Wellbeing. *Journal of Personality and Social Psychology*, 57 (6).
- Sandstrom, K. L., Martin, D., Fine, G. 2006. *Symbols, Selves, and Social Reality: A Symbolic Interactionist Approach to Social Psychology and Sociology*. Los Angeles, CA: Roxbury Publishing Co.
- Sandel, M. J. 2013. *What Money Can't Buy: The Moral Limits of Markets*. New York: Farrar; Straus; Giroux.
- Sassen-Koob, S. 1984. The New Labor Demand in Global Cities. In M. P. In Smith, *Urban Affairs Annual Reviews 26* (pp. 263-286). Beverly Hills, CA: Sage Productions.
- Schaffer, M. 1977. *The Tuning of the World*. New York: Knopf.
- Schank, R. C., & Abelson, R. P. 1995. Knowledge and Memory: The Real Story. In J. Robert S. Wyer (Ed.), *Knowledge and Memory: The Real Story*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Schultheiss, O. C. 2008. Implicit Motives. In O. John, R. Robins, & L. Pervin (Eds.), *Handbook of Personality: Theory and Research* (pp. 603-33). New York: Guilford.
- Schultheiss, O. C. 2010. *Implicit Motives*. (O. Schultheiss, & J. Brunstein, Eds.) New York: Oxford University Press.

- Schultheiss, O. C., & Brunstein, J. C. 2010. *Introduction*. (Schultheiss, & Brunstein, Eds.) Retrieved 01 03, 2016, from uni-erlangen.de: <http://www.psych2.phil.uni-erlangen.de/~oschult/humanlab/publications/sbintro.pdf>
- Schumaker, J. F. 2004, 07 04. *In greed we trust*. (New Internationalist) Retrieved 10 30, 2015, from newint.org: <http://newint.org/columns/essays/2004/07/01/greed/>
- Schwartz, S. 2012. An Overview of the Schwartz Theory of Basic Values. *Online Reading in Psychology and Culture*, 2 (1). <http://dx.doi.org/10.9707/2307-0919.1116>
- Science Council of Canada. 1988. *Winning in a world economy; University-Industry Interaction and Economic Renewal In Canada*. Science Council of Canada. Ottawa: Science Council of Canada.
- Sedikides, C., & Spencer, S. 2007. *The Self*. New York: Psychology Press.
- Sen, A. 1999. *Development as Freedom*. New York: Oxford University Press.
- Sen, A. 1979, 05. *Equality of What?* Retrieved from utah.edu: http://tannerlectures.utah.edu/_documents/a-to-z/s/sen80.pdf
- Sen, A. 2009. *Idea of Justice*. Cambridge, MASS: Harvard University Press.
- Sen, A. 2002. *Rationality and Freedom*. Cambridge, MASS: Harvard University Press.
- Sen, A., & Drèze, J. 2002. *Indai; Development and Participation, second edition*. New York: Oxford University Press.
- Sennett, R. 1998. *The corrosion of character: The personal consequences of work in the new capitalism*. New York: Norton.
- Shah, H., & Marks, N. 2004. *A wellbeing manifesto for a flourishing society*. London: The New Economics Foundation.
- Shannon, K. 2004, 03 10. *The Dunbar Number as a Limit to Group Sizes*. Retrieved 10 30, 2015, from lifewithalacrity.com: http://www.lifewithalacrity.com/2004/03/the_dunbar_num.html
- Shapiro, L. 2011. *Embodied Cognition*. New York: Routledge.
- Sharma, S. 2014. *In the Meantime: Temporality and culture politics*. Durham, NC: Duke University Press.
- Sharma, S., & Sharma, M. 2010. Self, Social Identity and Psychological Wellbeing. *Psychological Studies*, 55 (2), 118-36. doi: 10.1007/s12646-010-0011-8

- Sheldon, K. M., Ryan, R. M., Deci, E. L., & Kasser, T. 2004. The Independent Effects of Goal Contents and Motives on Wellbeing: It's Both What You Pursue and Why You Pursue It. *Personality and Social Psychology Bulletin*, 30 (4), 475-86. doi: 10.1177/0146167203261883
- Shin, D., & Johnson, D.M. 1978. Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5 (1), 475-92. doi: 10.1007/BF00352944
- Silberman, N. A. 2012. Heritage interpretation and human rights: Documenting diversity, expressing identity, or establishing universal principles? *International Journal of Heritage Studies*, 18 (3), 245-56. <http://dx.doi.org/10.1080/13527258.2012.643910>
- Skinner, R. T. 2012. Money trouble in an African Art World: Copyright, Piracy, and the Politics of Culture in Postcolonial Mali. *Journal of the International Association for the study of Popular Music*, 3 (1), 64-77.
- Slack, D. J., & Wise, J. M. 2015. *Culture and technology: A Primer* (Second ed.). New York: Peter Lang Publishing.
- Smith, E. R., & Makie., D. M. 2007. *Social Psychology 3rd Edition*. New York: Psychology Press.
- Smyntyna, O. V. 2009. Encyclopedia of Time: Science, Philosophy, Theology, and Culture. In J. H. Birx (Ed.). Thousand Oaks, California: Sage Publications Inc.
- Snow, David, A., and Leon Anderson. *Down on Their Luck: A study of Homeless Street people*. Berkeley: University of California Press.
- Sternberg, R. J. 2006. The International Handbook of Creativity. In J. C. Sternberg, *The International Handbook of Creativity* (pp. 1-10). New York: Cambridge University Press.
- Stiglitz, J. E., Sen, A., & Fitoussi, J.-P. 2010. *Measuring Our Lives; Why GDP Doesn't Add UP*. New York: The New Press.
- Strategies for Creative Cities Project. 2006. *Imagine a Toronto: Strategies for a Creative City*. Toronto: Andora Graphics Ltd.
- Sugarman, J. 2015. Neoliberalism and Psychological Ethics. *Journal of Theoretical and Philosophical Psychology*, 35 (2), 103-16. <http://dx.doi.org/10.1037/a0038960>
- Tagg, P. 1982. *Analysing Popular Music: theory method and practice*. Retrieved July 13, 2013, from tag.org: <http://www..tagg.org/articles/pm2anal.html>
- Tajfel, H. &. 1979. An Integrative Theory of Intergroup Conflict. In W. G. Worchel (Ed.), *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks-Cole.

- Tal, D. 2009, 09 23. *Toronto's place in the "creative economy."* Retrieved 10 3, 2015, from creativeclass.com:
<http://creativeclass.com/rfcgdb/articles/Toronto's%20place%20in%20the%20creative%20economy.pdf>
- Tan, S.-L., Pfordresher, P., & Harré, R. 2010. *Psychology of Music: from Sound to Musical Significance*. New York: Psychology Press.
- Teasdale, J. D., Segal, Z. V., & Williams, M. G. 1995. How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness training) help? *Behaviour Research and Therapy*, 33, 25-39.
[http://dx.doi.org/10.1016/0005-7967\(94\)E0011-7](http://dx.doi.org/10.1016/0005-7967(94)E0011-7)
- Terry, M. L., & Leary, M. R. 2011. Self-compassion, self-regulation, and health. *Self and Identity*, 10 (03), 352-62. doi: 10.1080/15298868.2011.558404
- The American Heritage Medical Dictionary. 2007. *Cognition*. (H. M. Company, Producer, & Houghton Mifflin Company) Retrieved 07 09, 2016, from thefreedictionary.com: <http://medical-dictionary.thefreedictionary.com/cognition>
- The Psychology Notes Headquarter. 2016. *Cognitive Theory of Motivation*. Retrieved 01 10, 2016, from The Psychology Notes HQ: <http://www.psychologynoteshq.com/cognitive-theory-of-motivation/>
- Tileagă, C. 2013. *Political Psychology: Critical Perspectives*. Cambridge: Cambridge University Press.
- Torrance, E. 1966. *The Torrance Tests of Creative Thinking-Norms-Technical Manual Research Edition-Verbal Tests, Forms A and B-Figural Tests, Forms A and B*. Princeton, NJ: Personnel Press.
- Treffinger, D. J., Young, G. C., Selby, E. C., & Shepardson, C. 2002. *Assessing Creativity: A Guide for Educators*. Sarasota, FL: The National Research Center on the Gifted and Talented.
- Trevarthen, C., Gratier, M., & Osborne, N. 2014, March/April. The Human Nature of Culture and Education. *WIREs Cogn Sci*, 173-92.
- Tusa, J. 2003. *On creativity: interviews exploring the process of creativity*. London: Methuen.
- Tyson, L. 2006. *Critical Theory Today* (Second ed.). New York: Taylor & Francis Group.

- UCL Institute of Health Equity. 2016. *Physical Environment*. (Marmot Review) Retrieved 07 26, 2016, from [instituteofhealthequity.org](http://www.instituteofhealthequity.org):
<http://www.instituteofhealthequity.org/themes/physical-environment>
- UK Essays. 2013, 11. *GDP Failure To Measure Standard Of Living Economics Essay*. Retrieved 11 08, 2015, from [ukessays.com](http://www.ukessays.com):
<http://www.ukessays.com/essays/economics/gdp-failure-to-measure-standard-of-living-economics-essay.php?cref=1?cref=1>
- UNESCO. 2015. *About World Heritag*. Retrieved from [unesco.org](http://whc.unesco.org):
<http://whc.unesco.org/en/about/>
- UNESCO. 2013. *Creative-Economy Report-2013*. Retrieved 09 27, 2015, from [unesco.org](http://www.unesco.org):
<http://www.unesco.org/culture/pdf/creative-economy-report-2013.pdf>
- UNESCO. 2001, 03 14-17. *International Round Table: "Intangible Cultural Heritatge – Working Definitions*. Retrieved 02 16, 2016, from
<http://www.unesco.org/culture/ich/doc/src/00075-EN.pdf>
- UNESCO. 2005. *Learning to Live, Living to Learn: Perspectives on Arts Education in Canada; Preliminary Report on Consultations conducted by the Canadian Commission for UNESCO*. Retrieved 8 13, 2014, from unesco.ca/
[/media/pdf/unesco/leaning_to_live_living_to_learn.pdf](http://unesco.ca/-/media/pdf/unesco/leaning_to_live_living_to_learn.pdf)
- UNESCO. 1995. *Our Creative Diversity*. Retrieved from unesco.org:
<http://unesdoc.unesco.org/images/0010/001016/101651e.pdf>
- UNESCO. 2010, March. *UNESCO. Questionnaire on the implementation of the Road Map for Arts Education Report for Canada March 2010*. Retrieved August 12, 2014
- UNESCO. 1993. *World Commission on Culture and Development*. Retrieved 9 4, 2015, from
<http://unesdoc.unesco.org/images/0009/000957/095724Eo.pdf>
- United Nations Department of Economic and Social Affairs. 2005. *Understanding Knowledge Societies In twenty questions and answers with the Index of Knowledge Societies*. Retrieved 10 10, 2015, from un.org:
<http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN020643.pdf>
- United Nations Environment Programme. 2007. *Global Environment Outlook 4*. United Nations Environment Programm. Malta: United Nations Environment Programm.
- United Nations. 2013. Universal Declaration of Human Rights. In M. Goodhart (Ed.), *Human Rights; Politics and Practice* (Vol. 2). Oxford: Oxford University Press.

- United Nations. 2013. International Covenant on Civil and Political Rights. In M. Goodhart (Ed.), *Human Rights: Politics and Practice* (pp. 403-24). Oxford: Oxford University Press.
- Vallance, N. 2006. The Missuse of "Culture" by the Supreme Court of Canada. In D. A. Canada, & A. Eissenberg (Ed.). Vancouver: UBC Press.
- van Dijk, T. A. 2004. Discourse, Knowledge and Ideology: Reformulating Old Questions and Proposing Some New Solutions. In M. Pütz, N. -v. Aertslaer, & T. A. van Dijk (Eds.), *Communicating Ideologies: Multidisciplinary Perspectives on Language, Discourse, and Social Practice*. (pp. 5-38). Frankfurt: Europäischer Verlag der Wissenschaften.
- van Dijk, T. A. 2005. *Ideology and Discourse A Multidisciplinary Introduction*. Barcelona, Spain: Pompeu Fabra University.
- Vinitzky-Seroussi, V., & Teeger, C. 2010. "Unpacking the Unspoken: Silence in Collective Memory and Forgetting." *Social Forces*, 88 (03), 1103-22.
doi: 10.1353/sof.0.0290
- Vinokur, A. 2008. Engaging with Steven J. Klees' 'A quarter century of neoliberal thinking in education: misleading analyses and failed policies.' *Globalisation, Societies and Education*, 6 (4), 363-65. doi: 10.1080/14767720802506706
- Volkova, A., Trehub, S. E., & Schellenberg, E. G. 2006. Music that works: contributions of biology, neurophysiology, psychology, sociology, medicine, and musicology. *Developmental Science*, 9 (6), 583-89.
- Vorhauser-Smith, S. 2011, July. *The Neuroscience of Performance People at their Best*. Retrieved 10 24, 2015, from <http://www.pageup.com.au/>:
http://www.pageup.com.au/uploads/WhitePapers/WhitePaper_Neuroscience_Performance.pdf
- Vroom, V. H. 1964. *Work and Motivation*. San Francisco: John Wiley & Sons, Inc.
- Wallis, G. 1926. *The Art of Thought*. New York: Harcourt, Brace and Company.
- Watson, G., Mason, A., & Ackroyd, R. 2014. *Social Engineering Penetration Testing; Executing Social Engineering Pen Tests, Assesments and Defence*. Waltham, MA, US: Elsevier Inc.
- Weinschenk, S. 2011, 02 11. *Behavioral Science, Brain Science, And Design*. (The Team W Blog) Retrieved 11 05, 2015, from <http://www.blog.theteamw.com/2011/02/03/100-things-you-should-know-about-people-57-there-are-4-types-of-creativity/>

- Weinschenk, S. 2012, 09 11. *Why we're all addicted to texts, twitter and Google*. (Sussex Publishers) Retrieved 07 15, 2016, from Psychology Today:
<https://www.psychologytoday.com/blog/brain-wise/201209/why-were-all-addicted-texts-twitter-and-google>
- Weisberg, R. W. 1999. Creativity and Knowledge: A Challenge to Theories. In R. J. Sternberg (Ed.), *Handbook of Creativity* (pp. 226-250). Cambridge: Cambridge University Press.
- Wells, John. 01 02, 2016, *Happiness: it's not what it used to be*. thespec.com., Retrieved 09 11, 2016, from <http://www.thespec.com/news-story/6215644-happiness-it-s-not-what-it-used-to-be/>
- Westra, L. 2011. *Human Rights: The Commons and the Collective*. Vancouver: UBC Press.
- Whyte, M. 2009, 06 27. *Why Richard Florida's honeymoon is over*. Retrieved 10 10, 2015, from thestar.com:
http://www.thestar.com/news/insight/2009/06/27/why_richard_floridas_honeymoon_is_over.html
- Wikström, P. M. 2013. *The Music Industry: Digital Media and Society Series*. Malden, MA: Polity Press.
- Wilson, D. A., Fletcher, M., & Sullivan, R. N. 2007. Acetylcholine and Olfactory Perceptual Learning. *Learning and Memory*, 11 (1), 28-34.
 doi: 10.1101/lm.66404
- Wilson, D., & Macdonald, D. 2010. *The Income Gap Between Aboriginal Peoples and the Rest of Canada*. Canadian Centre for Policy Alternatives. Ottawa: Canadian Centre for Policy Alternatives.
- Wilson, V. E., & Cummings, M. 2015. *Learned Self-Regulation* (4th. ed.). Redwood City, CA: Maria M. Cork Graphics and design.
- Winnipeg Economic Development. 2015. Retrieved 10 04, 2015, from economicdevelopmentwinnipeg.com:
<http://www.economicdevelopmentwinnipeg.com/>
- Woike, B., & Bender, M. 2009. Implicit Motives as a Way to Understand Cognitive Processes. *Social and Personality Psychology Compass*, 1 (9), 702-10.
 doi: 10.1111/j.1751-9004.2009.00198.x
- Wolf, E. 1982. *Europe and the People without History*. Berkeley, CA: University of California Press.

World Health Organization. 1948. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference. *Official Records of the World Health Organization* (p. 100). New York: WHO.

Wyclef. 2000, 06 10. *Noam Chomsky and Michel Foucault*. Retrieved 10 30, 2015, from <http://everything2.com/>:
<http://everything2.com/title/Noam+Chomsky+and+Michel+Foucault>

Zanto, T. P., & Gazzaley, A. 2009, September 11. *Neural suppression of irrelevant information underlies optimal working memory performance*. Retrieved 10 24, 2015, from <http://www.ncbi.nlm.nih.gov/>:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2704557/>

Zovkic, I. B., & Sweatt, D. J. 2012, 06, 13. Epigenetic Mechanisms in Learned Fear: Implications for PTSD. *Neuropsychopharmacology Reviews*, 1 (17), 77–93. doi:10.1038/npp.2012.79

APPENDICES

APPENDIX A: GROSS DOMESTIC PRODUCT (GDP)

Decision-making that impacts the wellbeing and creativity of individuals and groups are generally based on the supremacy of the GDP as measurement of economic growth indicator and social welfare. Such decisions include those involved with socio-economic planning, educational administration, work place administration, city planning and so on. Specifically, it is on the basis of correlations with a rising GDP that "creative cities" and the "creative economy" and "knowledge economy" have been touted as solutions to economic and social problems across a host of nations. However, it has been shown that there are serious shortcomings when relying on this model to measure social wellbeing; thus it is important to explore the model here.

The GDP is used to measure an economy's total income and expenditure on goods and services (Lee 2013, 3). Proponents of the GDP assert that the GDP indicates the average income to which individuals potentially have access. That is, "The more money each individual is able to access, the higher the potential standard of living they have" (UK Essays 2013). Therefore, according to Mankiw (2015), "because most people would prefer to receive higher income and enjoy higher expenditure, GDP per capita seems a natural measure the standard of living" (504). However, this assertion is questioned by the Center for the Advancement of the State Economy (CASSE), whose research reveals the GDP "has nothing to say about how income and wealth are distributed among the people" (2009, 1). Evidence of unequal distribution of wealth among the world's populations is factored into the research by Global Health Watch (2008), which also assert that the GDP fails as a fair indicator of access to wealth because "by focusing on aggregate income and economic growth, mainstream economics illogically treats the benefits to billionaire

and pauper as the same” (12). As a result, the potential for harmful policy decisions based on this false pretense of net gain can occur. This has not gone unnoticed by authors Stiglitz, Sen, and Fitoussi, (2010), who write:

[The] GDP mainly measures market production, though it has often been treated as if it were a measure of economic wellbeing. Conflating the two can lead to misleading indications about how well-off people are and entail the wrong policy decisions. (1)

In addition, Bronsteen (2014) asserts there are other indicators of welfare that objective wealth acquisition and related material consumption does not account for, writing, “Despite its ubiquity and importance, GDP has always been controversial because, among other things, it measures economic productivity rather than quality of life.” (14)

If such fundamental problems are inherent in the use of the GDP as a measure of wellbeing, then how did it become the international standard? The GDP was not initially conceived as a welfare indicator. According to Costanza, Hart, et al. (2009), during the Great Depression the US government needed to gather statistics to provide:

evidence for policy implementation to bring the country out of the depression...In the U.S. the Gross National Product was developed to meet this need...[In addition,] GDP estimates were used to show that the economy could provide sufficient supplies for fighting WWII while maintaining adequate production of consumer goods and services. (1-5)

The GDP was also believed to contribute towards a solution to international trade problems, such as “unstable currency exchange rates and discriminatory trade practices” during the nineteen forties (1). These problems also motivated:

the establishment of the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD—now part of the World Bank). The IMF was created as a forum for collaborative management of international monetary exchange and for stabilization of the exchange rates of countries’ currencies (5). [These solutions would] speed economic progress everywhere, aid political stability and foster peace. (5)

As a consequence, during this time, the perceived benefits of using the GDP were expanded to include the belief that:

growing the economy was seen as the path to economic wellbeing [which] “would allow people everywhere to obtain adequate food, housing, medical care, and other amenities.” (5)

Therefore, although never intended as a measure of personal welfare and success, the GDP's use has been slowly expanded to do just that.

“Economists have warned since its introduction that the GDP is a “*specialized* tool, and treating it as an indicator of general wellbeing is inaccurate and dangerous” (Costanza, Hart and Posner, et al., 6). Recent research by World Bank economists Markus Brückner and Daniel Lederman (2015) shows:

greater income inequality raises the economic growth of poor countries and decreases the growth of high-and middle-income countries....For the average country in the sample during 1970-2010, increases in income inequality reduce GDP per capita. Specifically, we find that, on average, a 1 percentage point increase in the Gini coefficient reduces GDP per capita by around 1.1% over a five-year period; the long-run (cumulative) effect is larger and amounts to about -4.5%”...Overall, our empirical results provide support for the hypothesis that income inequality is beneficial to economic growth in poor countries, but that it is detrimental to economic growth in advanced economies. (2-3)

The researchers conclude:

The analysis finds that, on average, income inequality has a significant negative effect on transitional gross domestic product per capita growth and the long-run level of gross domestic product per capita. However, the impact varies by the level of economic development, so much so that in poor countries income inequality has a significant positive effect on gross domestic product per capita. (3)

Using education in developed countries as an example, Naito and Nashida (2012) explain:

high inequality leads to less government expenditure on education... whether human capital is accumulated and the economy grows over time depends on the initial distribution of human capital, or income distribution. (112)

In Canada, income inequality has increased over the last fifteen years. According to data collected by the Conference Board of Canada, the richest five percent of Canada's population has increased its share of national wealth (nearly two fifths of total national income) while all other groups have lost a percentage of the share. The average income of the poor has only risen about two thousand dollars:

from \$45,800 in 1976 to \$48,300 in 2009, just 5% over 33 years, while the richest 5% of the population have seen an average increase of nearly thirty thousand dollars a year. Therefore, today's poor are much worse off in a relative sense than those of fifteen years ago. The growing gap signals that income growth is distributed unequally. (Canada 2015)

Income inequality is exacerbated in minority communities, and this restricts opportunities, freedom of choice and wellbeing in these populations. According to a 2012 article by Galbuzi, Casipullai, and Go, *The Persistence of Racial Inequality in Canada*, "Racialized Canadians earn an average of \$30,385 per year compared to \$37,332 for other Canadians, or 81 cents to the dollar" (2012). For Canada's aboriginal community in particular, the gap is even wider. According to the Canadian Centre for Policy Alternatives, "The gap is big: In 2006, the median income for Aboriginal peoples was \$18,962—30 per cent lower than the \$27,097 median income for the rest of Canadians" (Wilson and Macdonald 2010, 5). Their research also reveals, "Without government support, it will take 63 years for the income gap between First Nations, Métis and Inuit and their non-aboriginal counterparts to disappear" (3).

Increasing inequality exists in defiance of the "trickle-down effect" that a rise in GDP and its accompanying benefits to the top 5% are supposed to generate. Cingano (2014), asserts that:

focusing exclusively on growth and assuming that its benefits will automatically trickle down to the different segments of the population may undermine growth in the long run inasmuch as inequality actually increases. On the other hand, it indicates that policies that help limiting or—ideally—reversing the long-run rise in inequality would not only make

societies less unfair, but also richer. In particular, the present analysis highlights the importance of two pillars of a policy strategy for tackling rising inequalities and promoting equality of opportunities....policy makers need to be concerned about the bottom 40% more generally—including the vulnerable lower middle classes at risk of failing to benefit from the recovery and future growth. (29)

This research casts a solid shadow over the economic rhetoric creative economy supporters use. Still, in Canada, a significant number of socio-economic policies are centered on creative cities, the creative class, and the knowledge economy—all rooted in this flawed pretense. Polarization, limitation of life choices, marginalization of groups and voices, periodization of work and associated stress and ill-being can be linked to these flaws. In short, “Inequality does cause underdevelopment” (Easterly 2007, 773).

Economic wealth and economic growth play a limited role in the outcome of individual and cultural success, progress, and wellbeing. An excerpt from a Robert F. Kennedy speech at the University of Kansas, March 18, 1968 illustrates that this has been known for nearly half a century:

The Gross National Product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile. And it can tell us everything about America except why we are proud that we are Americans. (Kennedy 1968)

Assistant Director in the IMF’s External Relations Department, Tim Callen, writes:

It is also important to understand what GDP cannot tell us. GDP is not a measure of the overall standard of living or wellbeing of a country. Although changes in the output of goods and services per person (GDP per capita) are often used as a measure of whether the average citizen in a country is better or worse off, it does not capture things that may be deemed important to general wellbeing. So, for example, increased output may come at the cost of environmental damage or other external costs such as noise. Or it might involve the reduction of leisure time or the depletion of nonrenewable natural resources.

The quality of life may also depend on the distribution of GDP among the residents of a country, not just the overall level. (2012)

Levin (1997) considered the GDP in relation to temporal wellbeing, specifically the pace of life, and pondered the outcomes of a 1994 study by Diener and Tay:

The average life satisfaction in nations was highly correlated with a wide range of national economic indicators, including gross domestic product (GDP), purchasing power, and the fulfilment of basic needs....[The] study found a strong relationship between economic vitality and the pace of life; we hypothesized that this should also lead to a positive relationship between the pace of life and happiness. And this is exactly what we found: in all of our pace-of-life experiments, people in faster places were more likely to be satisfied with their lives.

These results depict an apparent paradox: People in faster places are more prone to suffer coronary heart disease, but they are also more likely to be happier with their lives. If a fast paced of life creates the stress that leads to cigarette smoking and heart attacks, shouldn't this same stress make for an unhappy existence?

The root of this seeming inconsistency, I believe, is economics, and the cultural values that come along with it. Cultures that emphasize productivity and making money typically create a sense of time urgency and a value system that foster individualistic thinking; and that time urgency and individualism in turn make for a productive economy. These forces—economic vitality, individualism, and time urgency—have both positive and negative consequences for people's wellbeing. On one hand, they create the stressors that lead to [stress related] unhealthy habits... on the other hand they provide the material comforts and general standard of living that enhance the quality of life. Productivity and individualism...have double-edged consequences. [He added], "In Mexico we don't control time, we live with the time." (255-6)

A later study by Diener and Tay (2013) attempted to explain these earlier findings:

If the rich were to garner most of the gains of rising societal wealth, increasing incomes might result in greater inequality and therefore harm rather than benefit the subjective wellbeing of the average person. (268)

Our findings indicate that for rising income to be most likely to influence SWB [subjective wellbeing], it must lead to greater optimism, financial satisfaction, and household material prosperity. In the cases where these factors move in the opposite direction from income, they can mask the effects of income on SWB. Thus, where optimism about the future is low, or aspirations for income are rising very quickly, higher incomes may not be associated with higher SWB. (275)

Professor of Sustainable Development at Surrey University, Tim Jackson, has stated:

Living well on a finite planet cannot simply be about consuming more and more stuff. Nor can it be about accumulating more and more debt. Prosperity, in any meaningful sense of the term, is about the quality of our lives and relationships, about the resilience of our communities, and about our sense of individual and collective meaning. (2013)

With reference to the GDP, in his 2009 book *Prosperity without Growth: Economics for a Finite Planet*, Jackson writes:

Some of that growth, in some form, is still needed—much of the underdeveloped world still needs more. But the overdeveloped world clearly needs less, and not just for environmental reasons. One study after another has shown in recent years that the tie between more stuff and more happiness has broken down—that economic growth is now more likely to yield isolation (those vast suburban castles) and disconnection (xii).

If there is indeed a growing consensus among economists that the GDP is not an accurate tool (and is perhaps a harmful one) for measuring social wellbeing and developing policy, why does it continue to be used? Grace describes decisions made within the overarching climate of economic growth as *policy science*, which he explains as:

excluding wider contextual relations ‘[through] sharply focused concerns with the specifics of a set of policy initiatives... and its seductive concreteness, its apparently value free and objective stance and its direct relation to action. (Grace 1991, 26)

In other words, it's easier to work with; it doesn't require grappling with the complexities of context and subjective human and societal wellbeing. However, according to Klein and Romero (2007), a confidential survey completed by economists revealed that forty percent were shown to:

disagree...theoretical models used in economic research are generally reflective of the state of the world they are meant to portray...[these findings indicate a] preference falsification, where many individuals play along with a situation they do not really believe in. (267)

Klein and Romero suggest these discrepancies between beliefs and practices may be a result of the marginalization of academic voices that run counter to the established norm, academic voices that are:

‘escaping’ from the turmoil and mud of politics...from a disillusion[ed] contemplation of the march of events...[from] a sense of impotence...[from] unpopularity and marginalization of going against the tide... from the moral and cultural factors of the problem... from real-world complexities and situational peculiarities that frustrate the will to know and embarrass the pretense of knowledge...from the workplace acrimony and career hazards of ideological dissonance. (266-7)

There are economists, sociologists, psychologists, and academics from other fields who are proposing alternative ways to measure progress and success that encompass a wider range of contributors to sustainable environmental and human wellbeing. In 2009, former President of France, Nicolas Sarkozy, concerned about the shortcomings of the GDP as a model to measure the subjective scope of human welfare, supported an international committee of economists. The objective of the commission “was to align better the metrics of wellbeing with what actually contributes to quality of life, and in doing so, to help all of us to direct efforts to those things that really matter” (Stiglitz, Sen and Fitoussi 2010, 19).

The commission concluded their work with three suggestions. One of these in part reads:

Putting the sustainability issue in these terms compels recognition that sustainability requires the simultaneous preservation or increase in several “stocks”: quantities and qualities not only of natural resources but also of human, social and physical capital. Any approach that focuses on only a part of these items does not offer a comprehensive view of sustainability. (193)

Similarly Costanza, Hart, et al. (2009) write:

Useful measures of progress and wellbeing must be measures of the degree to which society’s goals (i.e., to sustainably provide basic human needs for food, shelter, freedom, participation) are met, rather than measures of the mere volume of marketed economic activity, which is only one means to that end. (1)

The economy draws benefits from natural, social, and human capital and the quantity and quality of such capital, in turn, is affected by net investment from the economy. By measuring only marketed economic activity (the inner circle), GDP ignores changes in the natural, social, and human components of community capital on which the community relies for continued existence and wellbeing. As a result, GDP not only fails to measure key aspects of quality of life; in many ways, it encourages activities that are counter to long-term community wellbeing. (9)

APPENDIX B: THE CREATIVE ECONOMY AND EDUCATIONAL POLICY

B.1 The Creative Economy and Creative Cities

Florida has argued for more than a decade now, that as the world's leading economies have increasingly shifted from traditional industries such as natural resources, manufacturing, and service industries towards 'high tech and advanced services' industries, creativity should play a vital role in wealth and progress. Drawing on historical models, Florida claims it is cities which are the creative centers of successful cultures. Florida believes successful cities will contribute to the success of nations at large, "Creativity [once again] has become the principal driving force in the growth and development of cities, regions, and nations." (Florida 2002). According to the Conference Board of Canada (2008), it is "powering the great ongoing changes of our time...the defining feature of economic life. Creativity has come to be valued...and systems have evolved to encourage and harness it...because new technologies, new industries, new wealth and all other good economic things flow from it." (1-2)

The Conference Board of Canada report acknowledges and supports creative city policy implementation:

Innovation—in the context of this chapter, the commercializing of creative value—is assisted by the concerted efforts of business, education, and government to turn cities into magnets for creative workers and investment capital...[Creative cities are] characterized by an industrial atmosphere strongly oriented toward the production, absorption, consolidation, and dissemination of new thoughts and technologies [and] involve cultural producers along with their business, education, and government partners... When governments create a business environment favourable to research and development (R&D), when business-education-government partnerships support the development of entrepreneurial skills and local talent, and when players in the cluster network internally and externally, they increase their chances of innovating, including in the area of commercially viable creative products and services. (37)

An example of how far Florida's ideas had spread into municipalities appeared in the 2009 article in *Excalibur* (York University community newspaper), titled *Toronto's place in the "creative economy,"* which reads:

Capitalism as we know it is about to make a leap forward. Will Toronto ride that wave....What is this creative economy? It is an economic system that relies most on ideas to serve as its major capital, instead of services or physical capital. Take Google for example. In an economy based on ideas, the potential for breakaway successes like Google is far greater. That's because ideas, like viruses, are infectious. When an idea—like a computer program—is developed, the cost of making copies is negligible, while the potential profits are limitless....Post-secondary institutions are important because they are the center of cutting edge research and development. Not only do schools create the future talent pool, but they also stimulate innovation that is utilized by various companies. Thus, it is probably not highly controversial to say that provincial and federal governments need to step in to further invest in the city's various institutions of learning and make post-secondary education more accessible...A recent government report, "Past Victories Future Promise: Culture on the Competitive Edge," has indicated a willingness to meet this challenge by setting a goal of increasing attendance in post-secondary schools from the current 40 percent participation rate to 60 percent of those between the ages of 18 and 24. Through this investment, the Ontario government aims to have more than 50 percent of its citizens work in "creativity-oriented jobs" by 2030, up from the current 30 percent....If the latest Ontario government report is carried through to fruition, Toronto could soon see itself become a truly world-class city. (Tal 2009)

The Government of Nova Scotia announced details of their economic plan in their online news source the 'Bulletin', which focused on investment in the creative economy. Their Budget 2015–2016 will align the creative sector with Nova Scotia Business Inc. It calls on policy makers to ensure "development support and promotion for creative industries...[which helps] to grow the sector and ensure the culture strategy aligns with provincial economic goals" (Government of Nova Scotia 2015, 1). In Manitoba, where manufacturing and agriculture are the biggest sources of revenue and employment (Manitoba Government 2015), the creative economy buzz is alive in the city of Winnipeg. A municipally sponsored advertisement video for the creative economy focuses on new media technology in Winnipeg, in which the city plays its part "not [as a city] of

agricultural workers [but] of culture” (Winnipeg Economic Development 2015). In the Yukon, government policy-makers are also drawing on the creative economy ideology in attempts to make their cities culturally and economically competitive. A 2014 government report sponsored by the Creative Class Group (whose founder is Richard Florida) emphasizes the need to shift from manufacturing and natural resources as a means of employment and revenue towards a creative economy. The report defines the creative economy as “two large categories.”

- The Creative Core work in management, business and financial operations, law, and as health care practitioners.
- The Super Creatives work with computers and mathematics; in architecture and engineering; life sciences; education; and arts, design, entertainment, and media. (Government of Yukon Department of Economic Development 2014, 4)

The report boasts of the Yukon’s creative class presence:

An Economic Revolution Half a century ago, if someone predicted that almost 7,000 of the 37,000 people who live in Yukon today would have jobs that turn on ideas rather than physical skills, few would have believed it. Most people would have taken it for granted that as remote a region as Yukon would make its livelihood from mining, timber, and furs—from extraction, as a transportation nexus, or a military base. And yet Yukon not only has a significant creative class presence, it is larger in proportion to its population and growing faster than the creative class in Canada as a whole. . . . The creative economy is spiky; in many ways it can be winner-take-all. Creative class workers earn good salaries, and many have challenging and fulfilling jobs. Service workers and blue-collar workers generally fare much worse. The creative economy’s spikiness expresses itself geographically too. Wealth and talent concentrate in some cities and regions much more than they do in others. (3-5)

As part of the 2008 budget, Premier of Ontario Dalton McGuinty hired Richard Florida and Roger L. Martin, Dean of the Joseph L. Rotman School of Management University of Toronto to provide a report with “recommendations to the Province on how to ensure Ontario’s economy and people remain globally competitive and prosperous.” Their recommendations can be summarized in one statement, “we must transform from a routine-orientated to a creative

economy” (Martin and Florida 2009, v). Four years earlier an article appearing in canadianbusiness.com provides insight into Rotman’s own ideas on economics and culture.

Bringing business and government together is critical. We are moving into an era where the idea that each can work in their own silo will no longer function. The buzzword that is now being used is ‘public-private’ partnerships...I have always been interested in public policy and have believed very much in the model in the United States, where there is greater interchange between business and government.... Canadians can compete. We have got to have the confidence to push ourselves...we are a small player in the world. That means we have to be better and fight harder. (Bogomolny 2004)

In short, Florida's creative cities and the creative economy have become policy across Canada.

B.1.1 Critiques

Creativity has perhaps never appeared more predominantly in critical public policy discourse than since Florida published his ideas in his 2002 bestselling book *The Rise of the Creative Class*. At first, the ideas positioned creativity as a type of shining knight that was going to swoop into failing cities and revitalize their local economies, enrich their cultural diversity, and propel them to success in a competitive global market place. Creativity was to take the shape amongst a creative class of individuals, entrepreneurs who would contribute to the GDP via a knowledge economy and the industrialization industry of ideas, innovation, research, and technology.

Florida believed creative cities where creative people congregate would have the greatest economic growth. However, Pasquinelli (2007) believes “Richard Florida’s concepts of creative class and creative economy are based on (controversial) statistics only, and on the idea of a political agenda for creative industries fuelled by local governments” (73). O’Regan (2001) explains the impetus for accepting such ideas may be rooted in the fact that in difficult economic times, it is common that economic growth via “entrepreneurialism is encouraged, and there becomes a push for commercialism to exploit this effect, which can lead to the dilution of culture

to something more mainstream towards greater economic benefits.” The dilution of culture is only one of the troubling outcomes that have occurred in the years since Florida’s ideas have become public policy. Issues are particularly apparent in educational and cultural domains that foster and facilitate creative wellbeing.

B.1.2 Creative Cities and Economic Impact

Research suggests the graphing of a creative economy plan on a municipality in order to revitalize culture and stimulate economy across all workers does not always work, particularly with relation to manufacturing, horizontal integration of industries, and city size. According to Brabazon (2015), the implementation of creative city plans “tend to result from the following three phases: 1) “A city declines, through a loss of historic purpose, disinvestment and a loss of industries; 2) There is a desire to attract investment. The phrase 'new economy' is used; 3) Urban regeneration results, which involves building construction and gentrification” (9). However, she points out:

Because so much of the creative industries neglected manufacturing and agriculture, focusing instead on the service sector, media industries and tourism, it did not take root and create the horizontal integration between industries. (26)

Indeed, in many ways the Floridian focus on industries like entertainment, software, and social media creates a distorted set of economic priorities. The creatives, after all, generally don’t work in factories or warehouses. So why assist these industries? Instead the trend is to declare good-paying blue-collar professions a product of the past. (27)

It is interesting to note that the Canadian Government commissioned the Conference Board of Canada, in partnership with Heritage Canada, to provide a report on the creative economy. The excitement illustrated throughout the report at the prospect of exploiting intellectual property in the creative industries within the creative economy initiative seems ironic. This is because in the

same year, Prime Minister Stephen Harper, in defending a cut of 47 million dollars from arts funding, stated that ‘ordinary people’ didn't care about arts funding.” He continued:

I think when ordinary working people come home, turn on the TV and see a gala of a bunch of [artists] at, you know, a rich gala all subsidized by taxpayers claiming their subsidies aren't high enough, when they know those subsidies have actually gone up—I'm not sure that's something that resonates with ordinary people. (Benzie, Campion-Smith and Whittington 2008)

Brabazon (2015) reconciles this apparent irony: “Creative industries strategies focus on the development of seed funding and entrepreneurship. Cultural value was not the focus. The capacity to generate economic development and profit was the goal...While [this type of focus may have elements of success in large cities] there are greater requirements and necessities for policy makers in smaller cities. Ignoring the importance of economic dividends and outcomes for the sake of ‘art’ is not an option.” That is, creative industries and cities do not benefit art or cultural creativity; they were never designed to do that. They have always been about economics.

In 2009, two years after Richard Florida had arrived in Toronto, a “Toronto-based collective, including the group *Creative Class Struggle*” organized a public forum to oppose “the presence of Richard Florida and the Martin Prosperity Institute at the University of Toronto, as well as the wider policies and practices they represent.” Uzma Shakir, one of the collective’s organizers and speakers stated:

Richard Florida's exotic city, his creative city, depends on ghost people, working behind the scenes. Immigrants, people of colour. You want to know what his version of creative is? He's the relocation agent for the global bourgeoisie. And the rest of us don't matter”[sic]...And if you're not ‘creative,’ best of luck. If you're a hospital worker, or a childcare worker, you're just erased completely....We need to cut each other's hair, take care of each other's kids. We don't need a creative city—can we not just have a socially just city? What does Richard Florida do: He goes from city to city, be it Albuquerque or New York City, and tells them: You, too, can win. But there's an internal contradiction. Florida ranks cities—it's part of what he does, and not everyone can win....All of a sudden, you've got a situation that seems to allow usually marginalized people—artists, gays, lesbians, immigrants—to finally think that ‘Hey! There's some economic value to

our existence! He says. But the danger in this is that it reduces them to economic inputs: As long as you see immigration as a way to benefit Canadian capitalism, or culture and sexual orientation as tourism and economic development tools—you're in. But don't tell us about questioning racism, don't tell us about wanting to re-organize the family, don't tell us about most of your history. We don't want to hear it. (Whyte 2009)

B.1.3 Inequality

According to Donegan (2006), and Sassen-Koob (1984), Florida asserts there are two other classes of people, beyond the creative class, that are needed to contribute to a creative economy: the middle income earning manufacturing/transportation class, and a low wage service class. Florida believes low wage earners will be relied on by the creative class who have busy hectic lives and need an “army of servants” (Donegan, 5) to perform daily tasks. This growth of low wage earners has replaced a traditional middle-income manufacturing class in these types of cities (Sassen-Koob, 30).

“Cities that rank high on the Creativity Index also rank high on the Inequality Index, a measure of occupational income premiums that Stolarick created (Florida 2002, 2005; Stolarick, 2003). The new economic hope for cities, it seems, also has a “dark side” (Donegan 2006, 2). Hudson (2006) also suggests that “there is a significant positive correlation between the extent to which a region's economy has become ‘knowledge based’ and its level of income inequality” (Hudson 2006). In fact, Florida himself, after reviewing the research by others, wrote:

On close inspection, talent clustering provides little in the way of trickle-down benefits. Its benefits flow disproportionately to more highly-skilled knowledge, professional, and creative workers whose higher wages and salaries are more than sufficient to cover more expensive housing in these locations. While less-skilled service and blue-collar workers also earn more money in knowledge-based metros, those gains disappear once their higher housing costs are taken into account. (Florida 2013)

Although Florida concedes the creative economy movement has a downside, he still stands by his initial argument. An email from Florida on the subject reads, “The knowledge economy powers growth and generates class and geographic inequality at the same time” (Cagle 2013).

Donegan's view differs slightly, however:

The creative class, although not in itself responsible, “is a strong and significant predictor of Inequality...inequality and creative cities going hand in hand...inequality is not an “externality,” an unavoidable offshoot of the creative economy, as Florida says. Rather, inequality is the result of the underlying structure of the economy. (2006)

The striking overlap between being a creative city and being an unequal city is troubling not only in terms of ethical and political concerns, but also because it could have severe implications for the long-term sustainability of the economy. (2006)

Although Florida acknowledges the inequality that co-exists with creative cities, according to Donegan:

[he] is quite clear as to what, in his opinion, will not work to reduce inequality: unions, and other social or political movements led by the non-creative classes. He essentially dismisses strategies that seek to strengthen the position of the non-creative classes relative to the creative class, or strategies that will cement non-creative categories of work (Florida, 2005; Peck, 2005). (3)

Florida states that these social and political entities “are no longer relevant” and that we should “get beyond all these bureaucratic, large-scale, industrial institutions” (Donegan 2006, 6). “There is still a remarkable indifference by creative workers to connect their own conditions to the shaping effects of ministerial directives” (Lovink, 11).

Another aspect of inequality that arises in creative cities is gentrification. In fact, sociologist Eric Klinenberg has said that creative cities are underpinned by the notion of gentrification:

The movement of more affluent residents into previously poor neighbourhoods doesn't have to be all bad. Some neighbourhoods benefit from it, as do municipal tax rolls. But

the issue gets much more dicey if a community loses all its affordable housing and displaces long-time residents who had achieved a degree of stability. (Klinenberg 2013)

This criticism is consistent with research by social geographers who assert there is a link between inequalities brought on by “socio-cultural and economic developments” within “place[s] and space[s]” and wellbeing (Gillett, Andrews and Savelli, 19). Klinenberg, speaking on the impact of gentrification, states:

We always talk about the physical engineering that we need to protect cities, systems and people during crises. We have failed to recognize the significance of our social infrastructure, the way in which communications matters, the way in which our relationships with neighbours, and family and friends matters; the way in which our neighbourhood can protect or imperil us, depending on where we are... [In deeply troubled times] it's the social stuff that might make the difference between life and death. (2013)

B.2 Education for the Creative Economy

In order to produce the workforce required for the creative economy, creative cities policies must address the matter of education. *Talent, Technology and Tolerance in Canadian Regional Development*, a 2010 report produced by the Martin Prosperity Institute, a University of Toronto think-tank created for Richard Florida with support from the Ontario Government, contains a policy recommendation focused on educational partnerships:

We would encourage a strategy for closer contacts between the university and regional industry, so that the university becomes more than a talent producer. The university can play a more efficient role in relation to the university. The innovative ideas from universities need to be commercialized in order to create economic value. Also, having the local industry tap into the university stock of knowledge can increase the knowledge spillovers, and also have an effect on the number of new firm startups. (Florida, Mellander and Stolarick 2009)

The British Columbia Premier's Technology Council (2010) also describes specific educational objectives related to creativity:

Creativity: Another set of skills that will be key to success in a knowledge-based society is creativity and innovation. Creativity is the ability to think a new idea. (This includes the ability to rethink an old idea, for example, to think of a new application for an existing technology). Creativity and innovation allow one to generate new ideas and concepts, to see information in a different way from others, and to approach issues from a different direction than others. With a world built on information, being able to do something different with the same information will be an important advantage (10)...Innovation rarely takes place in just one head. It requires multiple people interacting in different ways and to an increasing extent this takes place through interactive technologies (11). Using results the Torrance Test for Creative Thinking showing....It should be noted that while IQ scores rise approximately 10 points with each generation due to enriched environments, there is an opposite trend for creativity scores in American children. (32)

The PTC suggests that its From Data to Discovery initiative will help to turn this trend around:

From Data to Discovery: Content will have to evolve constantly, not only to remain relevant but so students are ready to deal with how rapidly information changes in a knowledge-based society. Students must play a greater role in discovering their own content so the measurement of success will be related to how they find, use, and develop accurate, relevant content. (32)

A 2010 report from the Ontario Ministry of Tourism and Culture, overseen by Liberal Minister of Tourism and Culture Michael Chan, reads:

Support of the Creative Cluster also links closely with the Ontario Innovation Agenda, a plan introduced in 2008 to seize the many global opportunities for economic growth by making the most of the research and innovation talent that rests with Ontario companies and institutions. The Agenda seeks to extract more value from the province's investment in its world-leading research institutions, attract and retain the best talent and accelerate the commercialization of new discoveries. Its goal includes developing a workforce with first-rate skills in creative arts and stimulating private investment in knowledge-based companies. New content production is the fundamental form innovation takes in the Creative Cluster; however, technological innovation is also a core element in the Creative Cluster (see Box 2). Digital media content creators, as well as other content producers in the Creative Cluster, have already formed closer links with colleges and universities to experiment with—and develop marketable products from— exciting new technologies like 3D film and television and advanced motion-capture technologies. (Ontario Ministry of Tourism and Culture 2010, 12)

B.2.1 Neoliberalism, Globalization and Education

Creative cities, the creative economy, and the knowledge economy are policies falling out from the wider ideologies of neoliberalism and globalization. This set of ideologies and policies has especial consequences for education because creative workers, knowledge workers and global citizens must be produced in order to carry out the work in the new economy. *21st century skills*, those associated with this ideological construct, are the new curriculum. The assumption by educational decision makers that neoliberal ideology should be entrenched in schools, that the public must adhere and contribute to that ideology, and that it is necessary for wellbeing (as measured by the GDP) is illustrated in the tone of British Columbia's 2010 PTC report, *A Vision for the 21st Century*:

The fabric of a knowledge-based society is built around individuals with the ability to use information and continuously adapt to a rapidly changing globe. If BC is going to remain competitive, it must have an education system that ensures everyone, regardless of socio-economic background, is able to participate in such an increasingly demanding, knowledge-based society”(1)...“BC must have an education system that is structured so all students, regardless of background or community, have the opportunity, not only to reach their own goals but to contribute to our knowledge-based society...Education is about more than just individual prosperity, it also serves a public good...A recent multi-country study found that if the national average educational attainment level is increased by one year, aggregate productivity increases by 5 per cent—the equivalent of adding more than \$60 billion to Canada’s GDP”(5)...A knowledge-based economy can help to build “a society that creates, shares and uses knowledge for the prosperity and wellbeing of its people. (7)

The report states that its education system must be reformed “to prepare students to be successful in our rapidly changing world [because]” the pace of global change is combining with our shift to more a [sic] knowledge-based economy to create greater urgency around the need for change.” This requires an “education system that produces” a particular form of human capital—“skilled personnel.” The PTC frames their agenda as a "common-sense" response to the “demands of the

changing world” and affirms that these are the “demands that are coming from education’s clients and customers—the growing ranks of net generation students.” In explicitly locating education as a means of capitalizing students as ‘clients and customers’ and thereby attributing consumer demands to them, the PTC naturalizes neoliberal globalization as “inevitable and irreversible.”

In the United States, the “Partnership for 21st Century Skills (P21)—North America’s largest 21CL (21st Century Learning) advocacy group—suggests that 21CL themed curricula may challenge “instructors’ comfort zones,” but that reforms are needed to ensure that educational outcomes meet “economic imperatives” and curricula is grounded in “real-world” concerns—like employability, entrepreneurship, and the addition of "value" to "human capital". Part of P21’s mission reads, “To serve as a catalyst to position 21st century readiness at the center of US K12 education by building collaborative partnerships among education, business, community and government leaders” (Partnership for 21st Century Skills 2016).

In Australia, “a group of scholars declared that ‘the idea of the intrinsic value of a liberal education has virtually been jettisoned by Australian universities’” (Bostock 1999, 6). The Premier’s Technology Council in British Columbia points to China and Finland as models for the way in which knowledge is stored and accessed by learners in the 21st century.

Notably, the Chinese education system is moving away from the memorization of content to methods of inquiry, discussion, application of knowledge and use of technology” (PTC 23). This externalization of knowledge mandate is found in Finnish educational reform as well, “Also, they hope to develop student skills in areas such as “finding, analyzing, and categorizing information; and learning how to learn” as part of continuing to develop a modern, competitive national economy. (B.C. Premier's Technology Council, 18)

B.2.2 Privatization

Another way in which education, post-secondary education in particular, has been impacted by neoliberal mandates is the commodification of education. Inflation and a reduction of government operating grants are rendering institutions unable to keep pace with operating costs. Initial attempts to manage those costs involved shifting those costs to students. In 2002, it was reported that the 11 largest universities in Ontario increased tuition by a total of \$513 million (Robertson, McGrane and Shaker 2003, 3). However, even the steady rise in tuition rates hasn't been enough. "Universities [and colleges] are turning to private sector partnerships and donations from wealthy individuals and corporations to fill the funding gap" (5) in a climate that emphasizes corporate organization, privatization, entrepreneurship, and inter-institutional competition (MacKay 2014). Private donations from corporate business far "outpace" other revenue sources in Canadian universities. As a consequence of increasing corporate funding, a "reinforcement" of intellectual privatization is taking place (Robertson, McGrane and Shaker 2003, 33).

"Globalization has brought the free market into universities but with serious ramifications and significant costs" (Currie & Newson, 1998, p. 6). William W. Bostock wrote about this evolution in a 1999 article, appearing in the *AntePodium* (an electronic journal of world affairs) titled, *The Global Corporatisation of Universities: Causes and Consequences*, stating "Corporatized universities are expected to raise a much greater proportion of their own revenue, enter into business enterprises, acquire and hold investment portfolios, encourage partnerships with private business firms, compete with other universities in the production and marketing of courses to

students who are now seen as customers, and generally engage with the market for higher education” (1999, 6).

Brownlee writes, “The main impact of government “innovation” agendas, especially at the federal level, has been to commercialize university research.”

Recent federal budgets have continued along the same lines. In 2012, \$37 million was allocated to enhance granting council support for “industry-academic research partnership initiatives” in areas with promising commercial output. In 2013, all new money announced for the councils was targeted to support research partnerships with industry. In the 2014 budget, the government launched the Canada First Research Excellence Fund, which accelerated council support for targeted research in the interests of corporate Canada. (2016)

Brownlee explains provincial governments increasing role in corporatizing universities, writing:

Another disturbing trend is the appointment of executives from management consultant firms (that specialize in the privatization of public services) to university boards. In 2013, the Government of Alberta appointed Firoz Talakshi, a KPMG executive, to the University of Calgary’s Board along with Steve Allan, who specializes in “corporate restructuring and insolvency”, while the government of British Columbia recently appointed Ernst & Young Executive Fiona Macfarlane to the Board of the University of British Columbia. (2016)

The 2012 Commission on the Reform of Ontario's Public Services Report, recommendation 7-16, emphasizes the commercialization of research in post-secondary education:

The federal government, which to its credit prompted the surge in university-based research, does not cover all associated research costs. As a result, universities subsidize research from other sources. The review should also analyze commercialization outcomes of research and development investments. The ability of Canadian universities to commercialize remains very weak, as research suggests that U.S. universities perform about 14 times as much research as Canadian universities, but receive 49 times as much licensing income—a key indicator of the value of innovations. (251)

This ideology had become entrenched as early as 1988, as is illustrated in a report by the Science Council of Canada:

destiny includes closer university industry interaction....It is imperative that the university's knowledge be put to work for winning in a world economy. (Science Council of Canada 1988)

This is consistent with a neoliberal view of post-secondary education as an income-generating business and as a way to "win" in the globalized economy. The federal government released two white papers in February 2002, which proposed targets and goals for improving Canada's innovation performance. *Achieving Excellence: Investing in People, Knowledge and Opportunity* produced by Industry Canada, focuses on innovation and research while *Knowledge Matters: Skills and Learning for Canadians* addresses the issues of skills and education. The report states that in return for greater commercialization efforts, individual universities would receive a "long-term government commitment to their knowledge infrastructure" (Industry Canada 2001, 73). The government commitment to commercializing knowledge in order to support their knowledge economy mandates is further revealed in the same report:

Ensuring that Canada's regions and communities are all able to make the transition to a knowledge-based economy is another key priority. The Government of Canada created the Atlantic Innovation Fund to improve the Atlantic provinces' capacity to create, adopt and commercialize knowledge. The fund will support partnerships and alliances among firms, universities, research institutions and other organizations in Atlantic Canada. (30)

This ideology was reiterated a decade later in a speech by Canadian Finance Minister John Manley:

[L]inkages between business and universities need to be strengthened further still.... We want universities to become key focal points for economic activity, as well as research. When researchers tap the commercial applications of their findings, knowledge becomes both an input and an output of the economy. (Manley 1999)

During this time, many Ontario colleges adopted new names and mission statements that focused on technology and other specific neoliberal mandates. For example, "Sheridan College transformed itself into Sheridan Institute of Technology and Advanced Learning" (Fleming 3).

Note that there was an emphasis on partnering not only with business but with other post-secondary institutions. This was a way to cut costs, reduce duplication and competition within a geographic area, and, for colleges, to solidify academic credibility by partnering with universities during a time when private, online and other unregulated colleges were springing up and competing for students and revenue. Mohawk College and McMaster University, for example, collaborate in several program areas, including their Bachelor of Technology (BTech) programs, a partnership begun “in 1996 to meet private-sector needs and to create explicit, transparent and consistent degree completion pathways for graduates from Mohawk’s Advanced Technology programs” (McMaster University and Mohawk College 2011, 6). A 2006 report titled *Imagine a Toronto...Strategies for a Creative City*, directed by Merie Gertle from the Munk Center for International Studies, University of Toronto, in part, reads, “Strong post-secondary programs in creative education are vital for grooming creative talent and future creative industry employees” (Strategies for A Creative City Group 2006, 36).

Compression of courses and degrees are also measures thought to save money, both for students and institutions. The Report of the Commission on the Reform of Ontario’s Public Services, recommendation 7-29, which states: “Compel post-secondary institutions to examine whether they can compress some four-year degrees into three years by continuing throughout the summer. This could improve the facility efficiency and reduce the opportunity cost for students” (Commission on the Reform of Ontario’s Public Services 2012, 256).

B.2.3 International impact on education

The impact of neoliberalism on education is not just a North American issue. “Essentially, in the past three decades we have witnessed multinational and international actors like the World Bank,

IMF, and the OECD playing a major role in redefining the purposes, aims and goals of education across much of the globe, aligning reform with the major tenets of neoliberal economic” ideals (Olmos, Torres and Van Heertum 2011, xi). According to Easterly (2007), “These policies are enforced in part through the International Monetary Fund and the World Bank, which demand neoliberal reforms, especially in the form of structural-adjustment programs that impose economic policies and influence governance models as a condition for aid” (8). According to Lee and Friedrich (2008):

[The corporatization of education] is illustrated well by the “discussion surrounding the inclusion of education in the General Agreement on Trade in Services (GATS) through the World Trade Organization (WTO) [which] has shifted higher education from the public to the private domain” (Altbach, 2004). The field of global educational development is no exception. Specifically, ...the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the Organization for Economic Cooperation and Development (OECD), the European Union (EU) and the World Bank...have had considerable impact on educational discourses through international discussions and policy initiatives. This impact has promoted two visions of human freedom—one, the freedom of the independent individual to earn by accepting the unrestrained rule of capital and its imposed goals for daily being, and two, the freedom of the community member and others to purposefully grow in pursuit of their own goals by promoting popular rule. Unfortunately, most of these international organizations (i.e., the OECD, the EU, and the World Bank) have worked in favour of the former, thereby strengthening the global hegemony of the developed North over the comparatively underdeveloped South. UNESCO...has paved an ideological route towards global educational development different from the aforementioned Northern-centered organizations....[It] has served as an equitable engine of representative democracy and the support for human rights within global educational development...[and] has historically sought to resist the unrestrained rule of capital and the redefinition of education as a private good that have reinforced the world-wide dominance of neoliberal ideology. (Lee and Friedrich 2008, 1)

APPENDIX C: CREATIVITY KEY WORDS

“Key ideas and terms” from leading creativity researchers in Treffinger et al. (2002, 31-3):

- Teresa M. Amabile: domain skills, creative skills (intellectual and personality traits associated with creativity), and motivation
- Erich Fromm: Awareness and response, concentration, openness to conflict and tension
- Howard Gardner: problem solving, and producing new ideas or products which eventually becoming an accepted part of a domain
- William J. J. Gordon: metaphorical thinking
- J. P. Guilford: sensitivity to problems, fluency, flexibility, synthesis, novelty, reorganization or redefinition, complexity, and evaluation
- Donald W. MacKinnon: personal characteristics such as individuality, independence, determination, persistence, self-confidence and self-accepting
- Abraham H. Maslow: self-actualization, overcoming fear, autonomy.
- Sarnoff A. Mednick: finding new ways to use existing ideas
- Mel Rhodes: person, product, process, press
- Carl R. Rogers: [being] open to experience, us[ing] personal standards to evaluate,...accepting of the unstable in order to learn
- E. Paul Torrance: becoming sensitive to problems and or gaps in knowledge; then recognizing the difficulty and working towards solutions; then communicating the results
- Robert Sternberg: a confluence of six distinct but interrelated resources: intellectual abilities, knowledge, styles of thinking [cognitive, aesthetic, intuition, and emotional], personality, motivation, and environment

APPENDIX D: SUBJECTIVE CREATIVE WELLBEING (SCWB) INDICATORS

The following chart lists the indicators of SCWB discussed in this dissertation. They are organized according to the four dimensions of the self-system and the environmental and mediating subsystems of the SCWB model.

SELF-SYSTEM
Affective Dimension
Acceptance of impermanence (e.g. of feelings, knowledge, people, creative products) Aesthetic intelligence (gives meaning/validity to facts) Acceptance of self and others Adaptive psychophysical and psychosocial states Balance of positive and negative valence Balance of self-identity and non-identity Desire to express the ineffable Emotional intelligence Emotion gives meaning to experience (enhances memory, coherence, identity) Empathy Humility Non-judgmental and non-attached self- and other-awareness Openness to subjectivity Openness to new experiences (e.g. challenges, formative feedback) Self- and other-compassion Self-esteem, self-endorsed sense of competence Self expression Self-trust of internal frame of reference and intuition/tacit knowing Sense of healing/self-mending through creative process Sense of meaningful growth/life, self-actualization Sense of self-coherence & sustained autobiography (coherence among meaning/purpose, comprehension of reality, challenge manageability) Willingness to share knowledge and experiences Willingness to take creative risks/improvise
Physiological Dimension
Ability to anticipate compassionate sensation Attunement to paralinguistic gesture Early attentional filtering Embodied cognition (Mind-body-tool-idea/object-environment feedback, submission to things in the environment) Functional mirror systems for empathetic social learning Intelligences/learning styles awareness Multi-sensory perceptual learning and sensory augmentation Experiential learning Rest (for regeneration, growth, halcyonics) Physical awareness of corporeality in environment (sensorimotor capacities embedded in a biological/psychological/cultural context) Adaptive biophysical responses to negative feedback (stress) (e.g. breathing) Skilled use of tool(s): closed loop between action and perception Temperament awareness

Cognitive Dimension
<p>Ability to improvise</p> <p>Ability to sustain and direct attention</p> <p>Ability to visualize/use imagery to learn/practice/self-regulate</p> <p>Ability to let go of certainties (e.g. codified truths)</p> <p>Aesthetic learning/intelligence skills</p> <p>Being both creator and witness</p> <p>Balance among creative thinking processes (deliberate cognitive, deliberate emotional, spontaneous cognitive and spontaneous emotional)</p> <p>Cognitive efficiency, fluency, fluidity, flexibility</p> <p>Creative Problem Solving skills</p> <p>Critical agency</p> <p>Domain expertise (internal knowledge base, domain referents/schemas, procedural knowledge)</p> <p>Increased heuristic thinking, processes, learning</p> <p>Independent thought (ability to stand outside familiar conceptual/cognitive frameworks)</p> <p>Holistic cognition (emotional, rational, embodied)</p> <p>Balanced knowledge acquisition (awareness, embodiment, perception, reasoning, intuition, judgement of experience)</p> <p>Meta-awareness (wisdom, seeing the big picture)</p> <p>Meta cognition (self-reflection)</p> <p>Mindful decision-making (including critical citizenship)</p> <p>Rest</p> <p>Persistence over time</p> <p>Process-focused rather than goal-focused</p> <p>Resourcefulness</p>
Social Dimension
<p>Aesthetic learning (in relation to social environment)</p> <p>Balance between inner and outer life</p> <p>Conflict resolution skills</p> <p>Critical Agency</p> <p>Knowledge of social context, cultural/domain beliefs, values, norms, practices, representations</p> <p>Mutuality, sense of interconnectedness/interdependence</p> <p>Patience (with self and others)</p> <p>Reflexivity (continuum from socially-scripted to self-produced)</p> <p>Social frameworks contribute to sense of self-identity</p> <p>Self-transcendence (incl. compassion and empathy)</p> <p>Sense of social coherence: comprehensibility, manageability, meaningfulness</p> <p>Sense of social responsibility</p> <p>Sense of relatedness (relevance of participation in interpersonal and cultural activities)</p> <p>Social flexibility</p> <p>Social intelligence (acceptance, growth, coherence, contribution, integration relational influences)</p> <p>Sustained positive relationships</p> <p>Tradition maintenance and transmission</p>

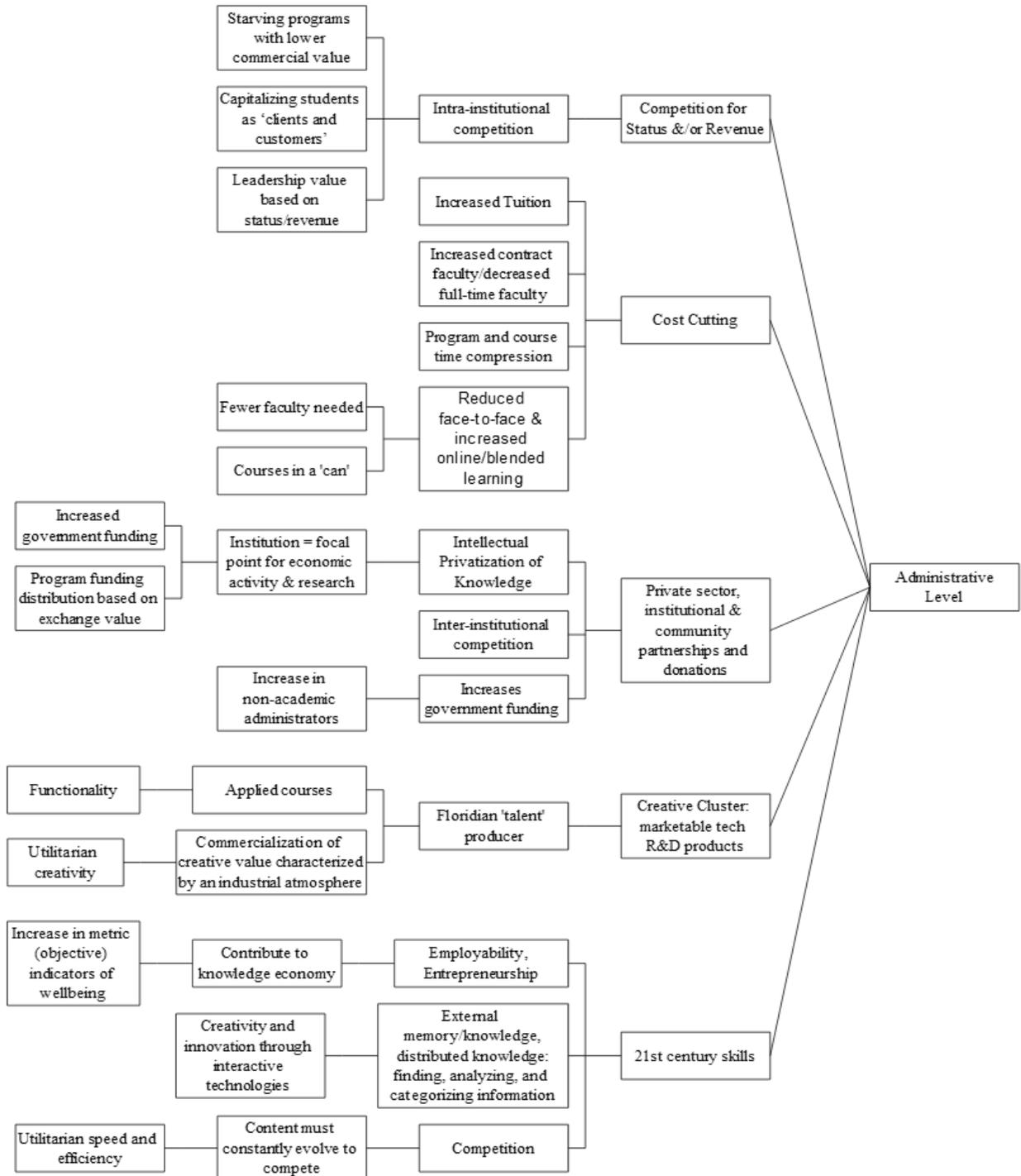
MEDIATING SUBSYSTEMS
Self Regulation Subsystem
<p>Ability to attenuate expectations, commentary, and criticism of others</p> <p>Ability to attenuate public self-consciousness</p> <p>Ability to attenuate self-monitoring process</p> <p>Ability to accept ambiguity, lack of closure and impermanence</p> <p>Ability to be alone</p> <p>Ability to be aware of more than one perspective/use positive reappraisal</p> <p>Ability to be open to and tolerate change (prohibit rigidity)</p> <p>Ability to be present and engaged with self, others, environment and experience</p> <p>Ability to control biophysical responses to stress</p> <p>Ability to control seeking system, impulses, habits</p> <p>Ability to direct and sustain awareness and attention</p> <p>Ability to imagine and to mentally rehearse</p> <p>Ability to master temporal environment (e.g. balance periods of work, rest, stress, homeostasis)</p> <p>Ability to regulate responses to negative autonomic feedback (including distress and eustress)</p> <p>Ability to remain calm in real time and changing circumstances</p> <p>Ability to self-forget (non-identity)</p> <p>Ability to uncouple sensory experience from self-narrative</p> <p>Compassion (sensitivity, sympathy, distress tolerance, empathy, non-judgement)</p> <p>Internal vs. external self-mediation</p> <p>Patience over time</p> <p>Process focus (vs. outcome focus)</p>
Motivation Subsystem
<p>Cognition driven by personally or culturally meaningful goals</p> <p>Congruency between non-verbal-implicit cues and verbal-explicit cues</p> <p>Broad cognitive scope with lowered motivational intensity for making connections/seeing periphery</p> <p>Freedom from engagement-contingent, completion-contingent, and performance-contingent rewards</p> <p>Goal experience congruent with anticipated affective experience</p> <p>Goal management is self-directed</p> <p>Goal setting and management is skilled (assessment of complexity in relation to perceived capabilities, time, prioritization)</p> <p>Heuristic rather than algorithmic goal behaviour</p> <p>Implicit-explicit motive congruency</p> <p>Intrinsically motivated (autonomy, relatedness and competence)</p> <p>Narrow cognitive scope with heightened motivational intensity for knowledge acquisition/memory</p> <p>Perceived capabilities match challenges: potentiality intensity</p> <p>Periods of Rest</p> <p>Persistence over time</p>

ENVIRONMENTAL SUBSYSTEMS
Environmental mastery (full-scope capacity and freedom to choose temporal, physical and social environments suitable to SCWB), including:
Temporal Subsystem
Balanced time orientation Experience of culture-based lived time and space Opportunities to learn and face challenges Perceived time pressure (or lack there of) is comprehensible, meaningful, and manageable (temporal-coherence) Periods of rest and quiet Real-time experiences Self- or culturally-determined temporal environment Sense of satisfaction with use of time Time to participate in and contribute to cultural life
Physical Subsystem
Access to physical representations of culture Acoustic ecology (humane environment) Attention ecology (quiet, free of distractions, isolation of object of attention) Ecological sustainability Freedom from socially engineered space/ecological biases Safe, supportive physical climate Self- or culturally-determined learning/work environments Real world environments (e.g. experiences, contextual learning, face to face learning) Sense of place and inclusion in learning/work environments Silence facilitated Safe, supportive social climate
Social Subsystem
Balance between interaction and solitude Collaborative, active learning Cultural overlap (intercultural/interpersonal dialogue and sharing) Self- or culturally-determined use of technology Discourse facilitates agency, expressiveness Sense of group dignity Emancipative, human-centred values Emphasis on formative feedback Emphasis on use-value over exchange value of creativity Freedom of self-expression Freedom from surveillance and restriction of choice Freedom to participate in and contribute to cultural life Freedom to reason, question and reassess Heterogeneity (diversity of ideas) Manageable number of meaningful relationships Mutuality (sense of interconnectedness and interdependence) Non-competitive, non-judgmental environment Opportunity for growth/advancement/accomplishment of goals Provisions for heterogeneous cognitive styles Provision of platform (“thinking society”) for social knowledge/memory and reflexivity Respect for differences and non-conformity Self-determined, internally-contested social memory, representations, practices and experiences

Socio-cultural homeostasis

Societal goals based on uniform progress (equity) (vs. net progress goals)

APPENDIX E: INSTITUTIONAL ADMINISTRATIVE LEVEL



APPENDIX F: TEACHING AND LEARNING LEVEL

