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CHANGE IN SYSTEMS: THEORY AND IMPLICATIONS

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FAYE GOSNELL

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Submitted by

Faye Gosnell

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The thesis examination committee certifies that the thesis
and the oral examination is approved

Supervisor:

Dr. Paul Jerry
Athabasca University

Committee members:

Dr. Jeff Chang
Athabasca University

Dr. Emily Doyle
Athabasca University

Dr. Frank Thomas
Texas Christian University

April 22, 2016

1 University Drive, Athabasca, AB, T9S 3A3 Canada
P: 780.509-7536 | Toll-free (CAN/U.S.) 1.800.788.9041 (7536)
fgs@athabascau.ca | fgs.athabascau.ca | athabascau.ca

Dedication

This work is dedicated to my daughter, Brooke, who is a bright and dynamic light in the world; to my parents, Sue and Ken, who have supported and inspired me; and to my client, the Arab woman, whose story is our story.

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Abstract

Counselling psychologists are being asked, increasingly, to intervene on problems of human functioning that relate to cultural values held by groups, under the banner of social justice. However, counsellor education tends to privilege the dimensions of paradigms that deal with reality and how we can know it (ontology, epistemology, methodology), over the dimension that deals with values (axiology). Using a grounded theory approach to existing texts, this work is an attempt to integrate systemic thinking with recent developments in the social sciences related to change processes. Three questions are addressed: (1) What is the nature of the relationship between self and culture? (2) How is this relationship relevant to issues of systemic change? And (3) What are the implications for the field of counselling psychology? The literature suggests that culturally-situated moral identities are at the interface between self and society, and that these identities impact change processes in systems.

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Chapter I

INTRODUCTION

> Our only hope is that we learn to trigger the necessary higher order feedback processes before we destroy the planet (Keeney, 1983, p.140).

Overview

This research is about human social development. More specifically, it is about the role of psychotherapists in producing systemic change, whether they work primarily with individuals, or whether they work systemically. This research is an attempt to respond to the injunction in the Canadian Code of Ethics for Psychologists (CPA, 2000), worded as follows:

> In adhering to the Principle of Responsibility to Society, psychologists would: Participate in the process of critical self-evaluation of the discipline's place in society, and in the development and implementation of structures and procedures that help the discipline to contribute to beneficial societal functioning and changes. (IV.6, p. 29)

This task is important, in light of tensions within the profession of psychotherapy. On the one hand, therapists have been critiqued as 'architects of adjustment' who have facilitated clients' adaptation to an oppressive status quo (see Sugarman, 2015). On the other hand, changing the status quo remains an elusive project for most psychotherapists, for reasons I will discuss in greater detail throughout this work.

In this first chapter, I will orient the reader to my research, beginning with some reflection on my initial research question, as well as how it evolved. I will offer a rationale for this research, and will then pose specific questions to be addressed within this work, and will conclude the chapter with a brief overview of each of the chapters that follow.

Initial Research Question

In order to fulfill the CPA's ethical mandate to contribute to *beneficial* societal functioning, it would seem a prerequisite to understand societal functioning in the first place. As a point of departure for understanding something so broad and ephemeral, I engaged in critical reflection about how cultural values have been transmitted to, and how they have come to affect me, personally.

This particular point of departure was likely underscored by an invitation, early in my education as a psychotherapist, to develop cultural competence by reflecting on how my cultural positioning affects my interactions with differently positioned others. This involved reflecting upon 'cultural identities' – in the form of such variables as gender, ethnicity, sexual orientation, ability, and so forth. I noticed, however, that the list of identities reflected upon did not include 'monogamous.' This cultural identity was absent from the second edition of the first Canadian textbook on culture-infused counselling practice (Arthur & Collins, 2010).

The value of monogamy has been strongly transmitted throughout my life. For example, through various practices such as sending me to a Christian camp every summer throughout my youth and adolescence, my parents seemed to convey the message that being married and postponing sex is the correct way 'do' intimate relationships. Thus, when I discovered in my mid-20s that my father, who was an airline pilot, had had many extramarital encounters with flight attendants throughout his career, I was deeply curious about the reason for the discrepancy between what he had conveyed to me about how to do relationships, and what he had done in his relational life. My assumption was that there was some kind of cultural impetus behind his willingness to pay lip service to a practice (monogamy), which he struggled with himself.

Consequently, the issues of marriage and monogamy became focal points for reflecting on how cultural values had been transmitted, and how they had come to affect me, personally.

More importantly, because of the emotional conflicts that had arisen for me in the course of attempting (and often failing) to do relationships the 'right' way, I adopted a stance of indignant rebellion toward the values of marriage and monogamy and decided, for a time, to adopt a polyamourous identity. However, in counsellor training and elsewhere, it would seem that monogamy is a cultural bastion that has largely (though not entirely) evaded the deconstructing apparatus of postmodern thought. Thus, in keeping with the ethical injunction to participate in critical self-evaluation of the discipline's place in society, I felt some pull to render polyamoury more visible and to contribute some commentary to the literature that might help equip therapists to deal with relational issues in these domains more competently.

I began this research by asking, "Why do people still get married?" *Still,* I asked, because of current statistical trends and anecdotal evidence suggesting that marriage is much more difficult than its prevalence would imply. That people marry for love may seem obvious, desirable, and simple, but in a culture with a divorce rate hovering around 50% since the 1980s, and similar rates of marital infidelity (Barker & Langdridge, 2010), it seems very curious that more people are not deviating from this relational norm. As a sitcom character once put it: "If 50% of planes crashed, would you still fly?" I felt it was necessary, as an aspiring psychologist and family therapist, to meditate on this.

I discovered in that initial research that the term *mononormativity* was coined only as recently as 2005, in reference to dominant assumptions about the naturalness and moral superiority of monogamy (Barker & Landridge, 2010). In reflecting on this term, I quickly discovered that though the literature tends to conflate them, marriage is related to, yet

conceptually distinct from monogamy, and that both practices were implicated in the question of why people still marry, even if social pressure to marry has relaxed, and legal substitutes exist (Korteweg, 2001). Conley, Aiegler, Moors, Matsick, and Valentine (2012) reported that common views on the reasons for marrying and benefits of monogamy (such as safer and more satisfying sex, better relationship quality, and benefits to children) do not align with empirical evidence, and that the concept of monogamy lacks definitional consensus.

While marriage rates have declined in recent decades, common-law unions have increased so that most households in Canada still involve a monogamous couple living together with or without children, and the majority of couples do continue to opt for marriage (Ménard, 2011). Thus, to practice competently, I reasoned, therapists should understand the cultural mechanisms involved in practices of marriage, monogamy, and consensual non-monogamy, as well as how various enactments of these practices play into the kinds of problems of human functioning that psychologists work with.

A Revised Research Question

During an advanced qualitative methods course, I was encouraged pose a researchable question within a particular methodological tradition. For some reason, I found this very challenging. My attempted solution was to send an exasperated email to my advisor requesting his help. I could not shake the feeling that the marriage question was simply an example of something larger. He repackaged the issue with ease: "Oh yeah," he said, unceremoniously, "You're studying the role of sticky belief systems in second order change."

I had no idea what he meant by *second order change*. That was new terminology. Hearing my disorientation, my advisor's response was to suggest readings, most notably the works of Gregory Bateson and Bradford Keeney, as well as anyone else who had anything to do

with the *Mental Research Institute* (MRI) in Palo Alto, California. The MRI was a psychotherapy center for couples and families headed by Gregory Bateson's theoretical leadership, and Don Jackson's clinical leadership (Watzlawick, Weakland, & Fisch, 1974/2011).

The result of this reading is a theoretical product, arrived at through grounded theory methodology. Rather than simply repeat what these authors were saying, however, my aim has been to take the foundational understandings of change processes disseminated in their works, and integrate them with current empirical trends in the broader social sciences, relating to systemic change. Thus, the purpose of this thesis is to integrate, theoretically, cybernetic understandings of change processes with recent empirical developments in related disciplines, and to offer suggestions for training and practice.

Research rationale. Psychological work is situated at the interface between self and society. Psychologists work in various roles that involve navigating tensions between the biomedical sciences, which tend to advocate bottom-up approaches to problems in human functioning such as treating the neurochemistry of the individual, and social sciences, which are quite vocal (but less powerful) in advocating top-down approaches to the same problems: discourses about the social determinants of health would be an example (see Mikkonen & Raphael, 2010).

As a novice professional entering the field, psychology and psychotherapy have manifested – to me – as a disoriented professions in within the overall ecology. Psychology may be highly oriented to rigorous empirical standards of practice; however, as a student who has received exposure to various debates within the profession as well as a high degree of acculturation into postmodern therapies as they are practiced at the Calgary Family Therapy Centre (CFTC), I have personally found it difficult to orient myself as an aspiring psychologist.

Not only do I find the various discourses within psychology somewhat disorienting, I would add that psychology is a privileged profession within the social sciences. Sociologists and anthropologists, for example, do not get 'licensed' and have a 'clinical practice.' To illustrate my point here, I can recall a lecture from a criminology class in my undergraduate years at Queen's University, circa 2000, where respected sociologist, Dr. Vince Sacco, discussed how the field had accumulated the knowledge to reduce the crime rate by up to 63%. His lecture addressed the question of 'how.' I emailed him after the lecture to inquire if there was an applied institute of sociology somewhere that implemented all these brilliant ideas? He replied that sociologists (at that time, anyway) were somewhat constrained in terms of their power to affect change in tangible ways, though they were very good at publishing about it.

I recall asking about employment opportunities in the field of sociology, and the suggested options were: academic teaching and social work. When I asked what social workers did, I received answers along the lines of, "workers go into families' homes and remove children, or supervise parents, when parenting is of questionable adequacy." Clearly, that is not a fulsome description of social workers' scope of practice, but nonetheless, given psychologists' career and financial prospects, I view our profession as privileged.

It is also my view that psychology's general understanding of change processes is underdeveloped owing at least in part to its lack of integration with neighbouring social and bio-behavioural science disciplines. My project here will be to advance that integration. This work will involve an attempt to articulate a response to philosophical dilemma at the core of this problem. Specifically:

(1) What is the nature of the relationship between self and culture?

(2) How is this relationship relevant to issues of change in systems?

(3) What are the implications for the field of counselling psychology, specifically?

I will formulate responses to these questions in a recursive narrative format (a narrative that circles back upon itself while broadening outward to increasing levels of abstraction).

Implicitly, I have introduced my conclusions already: that historically- and developmentally-situated moral identities are at the interface between self and society, and that the operation of these identities will influence change processes at various levels, individual and aggregate. Moreover, the profession of psychology exhibits a somewhat nascent understanding of the processes occurring at this self-society interface, which leads to poorly coordinated practices in various domains of psychological activity.

I will aim to contextualize these claims by illustrating the current ecology in which the profession of psychology sits, both ideological and practical – as I have experienced the various tensions in the context of training in Alberta, Canada. To quote Keeney once again: "It is critical (even to the extent of survival) that the epistemological bases underlying patterns of action and perception be made explicit and understood" (1983, p. 14). This must include patterns of action and perception in our professional work.

Following the grounded theory methodology, these patterns will be framed as attempts to resolve the participants' main concern (*participants* being authors in psychotherapy and related disciplines), which is systemic change. Obviously, the scope of this subject matter is rather broad, so this work will be anything but a comprehensive synthesis. Rather, I would describe it as an attempt at an interim report on some important tensions within the discipline today.

In Chapter II, I will begin with a review of the literature, which in this case, will be a thematic analysis of foundational authors' work on the issue of second order change. I have chosen authors that speak to the paradigmatic foundations of current understandings of change,

within systemic therapies. These authors' assumptions are essentially bottom-up views of human functioning as there is heavy emphasis in these works on what humans, as cognizing systems, are capable of. After discussing relevant paradigmatic considerations, in Chapter III, I will discuss the methodology (an adapted form of grounded theory) that supported me in conceptualizing an updated theory of change processes. Chapter IV will focus on the ecology of the problem by illustrating tensions in psychology and psychotherapy as I understand them, then in Chapter V, I will focus on the question of what could be added to current understandings of change process by looking at ideas and empirical trends in various social sciences concerned with top-down perspectives on systemic change. This chapter will address the first research question, about the relationship between self and culture. Lastly, in Chapter VI, I will respond to the last two research questions. I will use the preceding chapters as a basis to illustrate the theoretical product, and will conclude with some implications for counselling psychology research, training, and practice.

Chapter II

LITERATURE REVIEW: THEMATIC ANALYSIS

> 'As you erudite people well know, the word amphibian comes from the Greek *amphi* and *bios*, meaning to live a double life. This refers, needless to say, to an ability to live both in water and on land. In that regard, amphibians are the most adaptable creatures in the world...But as those of you who've read spy stories or had extramarital affairs are aware, a double life implies a clandestine life, a life of secret behaviors. Now a frog is a little dumb animal with a poot-sized brain. It probably isn't the custodian of a hell of a lot of covert information. No, indeed. But rather than possessing secrets, suppose a frog *is* a secret. A secret link…
>
> 'The amphibian is the bridge between the terrestrial and the aquatic. I invite you to consider that it may also be a bridge…between the mind of man and the cosmic overmind.' (Tom Robbins, Half Asleep in Frog Pajamas)

Overview of Foundational Works Regarding Change Processes in Systems

There are those who have long since RSVP'd to Robbins' invitation to consider the frogs. In fact, in the fall of 2014, I attended a class at the University of Calgary on this very topic. As a practicum requirement, I was taking an introductory course in family therapy practice, and the instructor, Dr. Karl Tomm, delivered a particularly fascinating lecture entitled: "Alternative Ontologies and Epistemologies, with a Focus on Maturana's Theory of Knowledge" (K. Tomm, personal communication, November 20, 2014). For some reason, he feels strongly that the field of family therapy has something to learn from studies of frog cognition. I cannot say that I woke up the morning of that lecture with the expectation that I would be imparted a theory of everything grounded in someone's observations about an amphibian's retinal cells, but sure

enough: he applied the mathematical concept of *recursion* (using an operation on the product of that same operation) to Maturana's concepts, and in doing so, articulated a full cosmology – including its implications for both the evolution of human consciousness, and the practice of family therapy.

Dr. Tomm's lecture was apparently an exemplary form of recommended practice. In Downing's (2004) discussion of the perils of pluralism and the limits of human knowledge, he worded it this way: "This call for an encounter with what is most radically 'other' means, in philosophical terms, questioning the justification for one's own ontological and epistemological commitments by examining them in the light of the claims of alternative ontologies and epistemologies" (p.141).

In keeping with this general ethos then, in this chapter, I will offer a basic description of change processes in systems, according to influential foundational writers on the topic whose writings correspond, roughly, to the three most emphasized dimensions of paradigms in social science: ontology, epistemology, and methodology.

Maturana's work as an Ontological Foundation

Ontology is a dimension of paradigms that concerns beliefs about the nature of reality (Glesne, 2011). Since Dr. Tomm is one of my respected mentors, I took his invitation to better understand the implications of Maturana's work seriously. Dr. Tomm is not alone in attributing some significance to this work. In fact, Dell (1985) argued that Maturana's work provided the ontology that was missing in Bateson's epistemology, and that taken together, the two could provide a viable philosophical foundation for the whole of social science. Dell also noted that, nearing his death, Bateson had pointed to Maturana's work as an expansion of the cybernetic project begun with the Palo Alto project, and continued at the MRI institute. Fortuitously then,

Maturana also happened to be a good fit with my advisor's recommendation to study anyone affiliated with the MRI group.

Recent developments. Almost thirty years later, Dell's (1985) call to develop Maturana's work as a foundation for the social sciences has been echoed. In 2011, *Constructivist Foundations* published an entire special issue (volume 6, issue 3) devoted to Maturana's work as it relates to contemporary issues in social science. Strongly emphasized in these works were various ethical implications of Maturana's theory (Gash, 2011; Mascolo, 2011), as well as the potential of his theory to resolve conceptual issues in several fields from teaching (Bunnell & Riegler, 2011; Gonzalez, 2011), to cognitive psychology and linguistics (Kravchenko, 2011). Other journals, such as *Systems Research and Behavioural Science*, and *Frontiers in Psychology* have published articles dealing with the applicability of Maturana's ideas to organizational change (Schwaninger & Groesser, 2012), and the emergence of various social phenomena (Raimondi, 2014).

In addition, several journals have published recent articles about Maturana and Varela's notion of *autopoiesis* (the proposed mechanism that generates life in molecular systems), often organized around this concept's applicability to social phenomena (see Luisi, 2003; Smith, 2014; Urrestarazu, 2014; Vanderstraeten, 2014). These articles have been sufficiently impactful that very recently, Maturana (2014; 2015) has written articles in response to the general call to clarify how his ideas may apply to aggregate social systems, in addition to molecular living systems.

It is perhaps curious, then, that we see an almost thirty year gap between when Dell (1985) advocated his theory's relevance, and the current surge in publications. However, a very common critique of Maturana's work is that it is not easy to follow (Imoto, 2011; Luisi, 2003). Take, for example, his statement about objects, cited in Raimondi (2014, p. 7):

> Objects arise in language as operations of coordinations of coordinations of doings that stand as coordinations of doings about which we recursively coordinate our doings as languaging beings (Maturana, 2002, p. 28).

In my experience of Maturana's writing and speaking (from video), virtually all of his sentences have this kind of run-on and repetitive-sounding structure. Presumably, he does this because he feels it necessary to convey his meaning (which very often hinges on the notion of recursion); the downside is that he is very difficult to understand. This may be part of the reason Maturana's ideas have not had the impact Dell (1985) had suggested they merit. Other authors have noted that his work has had a similarly lackluster impact in biology, though this may be because nucleic acid mechanisms and replication are not privileged in Maturana's theory of life the way they are in mainstream life sciences (Luisi, 2003).

In keeping with these recommendations and trends, then, I will use the work of biologist, Humberto Maturana and his student, Francisco Varela, as an ontological foundation for understanding systems because the systems involved in individual and social change are *biological* systems. Both are from Santiago, Chile and did their doctoral and post-doctoral work at Harvard and MIT. Moreover, their experiments on frogs at those institutions have provided the basis for the epistemologies and methodologies espoused by the other theorists I will discuss.

Keeney's Work as an Epistemological Foundation

Indeed, Maturana's theory, with its emphasis on cognition, leads quite naturally into a discussion of epistemology: generally understood as a study of how we can know what we know (Glesne, 2011). For the purposes of this research, cybernetic epistemology will be the specific focus, since this particular 'way of knowing' is recognized as being well-suited to learning about

processes in systems that use feedback (Dell, 1985; Hoffman, 1985; Schwaninger & Groesser, 2012; Tomm, Strong, St. George, & Wulff, 2014).

Any discussion of cybernetics should draw heavily on the work of Gregory Bateson, as he is certainly a foundational theorist on this topic. To explain cybernetics, however, I prefer to refer to Bradford Keeney's work simply because it is a more concise exposé of cybernetic theory per se whereas Bateson's work, *Steps to an Ecology of Mind* (1972), is a much more sweeping epistemological account of the phenomena of mind. Keeney was not part of the MRI group, but his book *Aesthetics of Change* (1983), (*Aesthetics*, hereafter) was the outcome of his doctoral dissertation, and is considered a seminal work in cybernetic theory. Gregory Bateson was his mentor, and his work was well respected by other cyberneticians such as Heinz von Foerster, who wrote the foreword. Keeney attempted to articulate how cybernetic ideas apply to change processes in systems, and family systems in particular. I will summarize Keeney's understanding of cybernetic epistemology by paraphrasing his most thematic claims.

The MRI Group's Methodological Understandings of Systemic Change

Apart from philosophical considerations about what exists, how we can know it, and how we should conceptualize change, there is also the question of how to apply any of that knowledge in practice. Watzlawick, Weakland, and Fisch (1974/2011) wrote a book called *Change*, which was also about change processes in systems. These authors were clinician-researchers at the MRI, and in fact, they founded the *Brief Therapy Center* there in the late 1960s. Their book was the product of an attempt to better understand their own therapeutic methods, as they were puzzled by the success of their more "gimmicky" (meaning paradoxical) interventions (Watzlawick et al., 1974/2011, p. xvii). I will also discuss some theoretical extensions of their work.

Following an analysis of the themes in the foundational literature about biological systems and systemic change processes, and will offer some critiques. In the next chapter, I will discuss my use of an adapted form of grounded theory methodology to further develop the insights of these foundational authors.

Ontological Themes in Maturana's Work

As Bunnell and Riegler (2011) have noted, Maturana and Varela's work is extremely comprehensive, so any discussion of it carries a risk of trivializing and oversimplifying its implications. However, I have also noted that their work is not terribly accessible in spite of its breadth and merit. Thus, at some risk, I will articulate my basic understanding of their work.

A central preoccupation of Maturana's was the question of how an observer can do what he or she does in the act of observing. This question has a different emphasis than the traditional ontological question, which is simply about the nature of reality. His question is really about cognition – about the observer of reality, rather than reality itself – but as such, it is also an ontological question about the nature of living systems. This question naturally leads to a different understanding of cognition than what is generally accepted in the mainstream.

Embodied Cognition vs. Cognition

The difference between Maturana's view of cognition, and that of mainstream cognitive science is that he referred to cognition in an embodied sense, whereas mainstream cognitive psychology seems to conflate 'cognition' with 'thinking.' This conflation has spawned such practices as cognitive behavioural therapy (CBT). One of the originators of this practice, Aaron T. Beck, described *cognitions* as thoughts and images, and developed a model of psychopathology in which dysfunctional thinking mediates negative emotional and behavioural symptoms (Beck, 1997). He viewed dysfunctional thinking as the hallmark of psychopathology,

and assumed that when clients improve, it is because there is an improvement in the way they think (A. T. Beck, Rush, Shaw & Emery, 1979; Beck, 1997).

While there are various models in mainstream cognitive science, a common theme is that they generally tend to emphasize some kind of input-output computation model in which cognition (a.k.a. thinking) is a process whereby reality-out-there is encoded internally through symbols (images, words), and then communicated through a process of transferring re-presentations in a way that mirrors reality. According to Kravchenko (2011), this particular view of cognition is deeply mainstream. That thinking involves some accurate representation of reality finds evidence in the fact that CBT, with its focus on 'dysfunctional cognitions,' is a modern empirical titan and go-to therapy in managed health care settings (Deegear & Lawson, 2003).

Cognition in Maturana's sense however, is not about thinking per se; it is about knowledge, which he described as effective action (Maturana & Varela, 1987). For him, 'knowing' something may or may not involve what we normally distinguish as 'thinking.' For example, I do not have any articulate thoughts about how to metabolize sugar molecules or how to grow a baby, so I cannot tell you how to do either of these things, except in very basic terms. Yet, I must 'know' how to do both of them, because I have done both effectively. Similarly, while a pilot can both *describe* Bernoulli's principle and demonstrate knowledge of flight by actually *flying*, a bird cannot tell you the first thing about Bernoulli, but observers would readily agree that most birds 'know' how to fly. Hence Maturana and Varela's (1987) aphorism: *"All doing is knowing, and all knowing is doing"* (p. 26, emphasis in original). So cognition is embodied knowledge, manifested in action (Gumbrecht, Maturana, & Varela, 2006).

The question of whether an action is effective or not, is philosophically messy. Maturana and Varela (1987) claimed that actions are deemed to be effective (or not) only in a particular 'domain,' and only by a community of observers. For example, the bird's knowledge could be described as 'successful action in the domain of flying,' according to a group of observers who agree what flying *is*. Though I have not seen this issue aired anywhere in the literature, it seems likely that complex domains of action lead to fewer degrees of consensus among observers. This will be a central point taken up later in this thesis.

Domains. Domains are a fundamental concept in Maturana's theory, and are best described as a kind of space. Specifically, a *domain* is a space opened by any observer who makes a distinction (Imoto, 2011), and *distinguishing* is the act of bringing something forth from an undifferentiated background (Maturana & Varela, 1987). Doing so creates a space in which the observer can now relate to that which he or she has distinguished. For Maturana, observation begins with the ability to make distinctions (Gash, 2011). It is for this reason that he and Varela (1987) did not refer to all organisms as observers: only those who operate in language.

In complex domains, such as that of 'offering scientific explanations,' Maturana has emphasized that the community of observers has certain criteria that determine whether the explanation counts as acceptable or not; whether it counts as effective action in that domain (Maturana & Varela, 1987). The criterion of acceptability of different communities of observers is another notion that will feature centrally in this discussion, later on. In the meantime, I will discuss how Maturana and Varela came to see domains of consensus as important.

Subject Dependency

Maturana and Varela's understanding of cognizing systems might be described as a subject-dependent epistemology. This contrasts with mainstream views, which tend to fall into

the dichotomized camps: realist or subjectivist. I will discuss these paradigmatic differences in greater detail soon, but for now, I would suggest that there are four main concepts that account for why Maturana and Varela viewed cognition as embodied, and reality as subject-dependent (Gumbrecht, Maturana, & Varela, 2006). They are: *Structure-determinism, operational closure, generative mechanisms,* and *structural coupling*. I will briefly define and discuss the relevance of each of these terms.

Structure-determinism. This is perhaps Maturana's most basic tenet, because it is an ontological claim about the nature of systems, and it is not limited to biological systems. In general systems theory, a *system* is more than the sum of its parts; it also includes the relations among the parts. A system is a composite unity made up of component parts that are interconnected in such a way that change in one part triggers change in every other part (Bertalanaffy, 1968). Maturana and Varela (1987) added to this that every system has some kind of architecture, and this structure delimits the possible changes it can undergo. With this insight, they reframed the notion of 'stimulus' to mean 'perturbation.' In their view, perturbations from the environment are never instructions because they modulate, but do not determine, outcomes.

Maturana was tasked with better explaining this modulating-but-not-determining relationship between a living system and its environment. He distinguished two non-intersecting domains in which systems exist. The *domain of composition* refers to its internal dynamics, or in the case of living systems, its physiology, and *the domain of interactions* refers to the system's interactions with its environment, or more specifically, its *medium*, which is the part of the environment with which it directly interacts (Imoto, 2011). Always, from the perspective of the system, the domain of compositions has a determinate nature over the domain of interactions,

and the latter has a modulatory effect on the former. This double existence of living systems is perhaps the most the foundational notion in Maturana's ontology (Imoto, 2011).

Organization. Of course, any system has a history. The difference with living systems is that the limits on the changes they can undergo when perturbed are much broader than, say, those of a glass bottle. This is true of all living systems because of how they are organized. The organization of a system, in Maturana and Varela's (1987) view, refers to the relations necessary for it to exist. In their illustration, an observer distinguishes a chair by recognizing a certain relationship between 'legs,' 'back,' and 'seat.' This organization is synonymous the object's identity. For example, you can change the structure of a system (there are many different chair-structures), but not its organization, or it would cease to exist.

Maturana and Varela (1987) called the particular organization of living systems *autopoietic*, from the Greek roots of *self* and *producing*. In their observations of cells, they noticed that the difference between things that are living and those that are not is that living systems maintain some kind equilibrium by generating their own components within a boundary that is also of their own making. Live cells regenerate their components continuously by incorporating and transforming elements in their immediate environment. Cognition thus entails a special kind of reading of the environment, and the cell (or organism) can only make use of those elements which its structure 're-cognizes' (Luisi, 2003). The next idea is important to understanding how living systems read their environments, given their structures.

Operational closure. This notion deals with the question of how organisms perceive their environments. Operational closure is probably Maturana's most significant claim in terms of its implications for autopoietic systems, but while I have not read everything Maturana has written, most definitions I have found have been rather convoluted. Nonetheless, I have

formulated my understanding of this concept based on my reading of Maturana and Varela's (1987) work.

The phenomenon of operational closure was dramatized in full colour (forgive the pun) if one recalls the viral social media phenomenon of February, 2015 – #thedress – where, according to Wikipedia, the mother of a Scottish bride-to-be took a photograph of the dress she planned to wear to her daughter's wedding. The bride disagreed with her family about the colour, so she posted the image on Facebook, where her friends also disagreed over the colour: some saw it as white and gold, while others saw it as black and blue. The Salvation Army seized upon this opportunity to raise consciousness and created an ad with an image of a bruised woman wearing a white and gold dress, bearing the caption: "Why is it so hard to see black and blue?" In all, the issue of how animals perceive colour has been the point of departure for questioning the nature of the nervous system, and studies in this domain are what led Maturana to distinguish the notion of operational closure as the ontological predicament of living systems.

Colour vision: the frog experiments. Apart from humans disagreeing with each other about colour, Varela has additionally noted that birds see colours on a spectrum that includes four, rather than three primary colours, which means the world appears differently to birds than it does to humans (Gumbrecht, Maturana, & Varela, 2006). The implication, of course, is that we do not have unobstructed access to the world as it 'really' exists; rather, we perceive it in ways that are conditioned by the phylogenetic inheritance of our species. This means, humans share a genetic inheritance that will equip most members to agree about colours, sounds, textures, and so forth, while spiders perceive the same phenomena in very different ways. However, even within a species there will be minor variations. It is unproductive, in this view, to ask who is 'right,' but

Maturana and Varela nonetheless made some progress in determining *why* the differences may exist, as well as how to deal with them.

According to Hoffman (1985), Maturana's experiments on frogs were organized around his suspicion that the animals' retinal cells might be activating its other neurons in a closed internal loop where this signaling was going on entirely within the nervous system, with no direct 'input' from the environment apart from a general kind of triggering. Dell (1985) explained that, indeed, rather than finding a correlation between colours (defined by their spectral energies) and the activity of retinal ganglion cells, Maturana found instead that the nervous system was correlated with *itself*. For example, in humans, retinal cell activity will correlate more reliably with colour-naming behaviour than it will with colour, as measured by a spectrophotometer. As Maturana and Varela (1987) described it:

> The retina does not affect the brain like a telephone line that encounters a relay station at the [lateral geniculate nucleus], since more than 80 percent of the interconnections come together at the LGN at the same time. Consequently, the retina can modulate – but not specify – the state of the neurons [there]. (p. 162)

If a living system does not have inputs and outputs, such systems must be open to some things, but closed to others. This issue of open-yet-closed can be confusing, but Maturana and Varela (1987) described it like this: "the nervous system does not 'pick up information' from the environment, as we often hear. On the contrary, it brings forth a world by specifying what patterns of the environment are peturbations" (p. 169).

Phylogeny and ontogeny. Having established that organisms with differently structured nervous systems will read their environments very differently (depending on the history of the species, or *phylogeny*, that conditioned the genetic inheritance of that species), and moreover,

that even within a species there will be variations (depending on the developmental history, or *ontogeny*, that conditioned an organism's nervous system) what are the implications in terms of how humans relate, within these constraints, to the outside world of objects?

Implications. Hoffman (1985) noted that Maturana had taken great pains to explain this using the analogy of a pilot who lands an aircraft in very poor visibility. Because he does not have visual access to the outside world, the pilot's real task is to maintain the readings of his instrument panels within certain limits: he is only the controller of the values shown on his flight instruments. I enjoy this metaphor because I actually have very fond memories of my father coming home from his some of his trips and discussing this phenomenon. The first thing my mother would always ask was, "how was it?" At times he would reply, "you couldn't see the ground til you were on it." On those evenings, and much to our fascination, he would recount his 'CAT 2' or 'CAT 3' landings in detail. Hoffman concluded, "Maturana would say that living organisms are always making blind landings" (p. 385).

The question arises, then, as to how humans can coordinate themselves *at all* if they are, in a metaphorical sense, partially blind? This question becomes particularly significant in complex domains of action at the level of social aggregates. To explain human coordination in such domains, Maturana used the following concepts.

Generative mechanisms. Maturana has used *generative mechanisms* as explanatory conventions. If a generative mechanism is given the opportunity to function, it will give rise to the phenomena to be explained through its operation [CFTC video, 1986]. Maturana sought a generative way of explaining phenomena as an alternative to deductive, cause-and-effect explanations, which he viewed as reductionist (Imoto, 2011). In my reading of Maturana, he has essentially sought to understand phenomena through the notion of 'giving rise to.'

Autopoiesis. Apart from describing the organization of living systems, *autopoiesis* is also an example of a generative mechanism: it is the one that gives rise to life in living molecular systems. Through its operation, reactions that generate the components of a cell (such as mitochondria, DNA, and so forth) are encompassed within a semipermeable chemical boundary that allows the cell to use elements from its environment to sustain itself. The notion of a boundary is very important because if there were no boundary, the cell would cease to exist. Thus, the boundary imparts autonomy to the cell (Luisi, 2003).

The boundary issue. Social scientists have struggled to figure out whether and how notions of boundary, identity, and organization map onto the social domain. These issues actually feature quite centrally in family therapy practice. Many family therapists and sociologists seem keen to apply the notion of autopoiesis to social aggregates (see Luisi, 2003; Urrestarazu, 2014). Even Keeney (1983) claimed that social units were autopoietic. However, Matruana and Varela have insisted that that autopoiesis only applies to molecular living systems:

> These ideas are based, in my opinion, on an abuse of language. In autopoiesis, the notion of boundary has a more or less precise meaning. When, however, the net of processes is transformed into one "interaction among people", and the cellular membrane is transformed into the limit of a human group, one falls into an abuse. (Varela 2000, cited in Luisi, 2003, p.57).

I would tend to agree with Maturana and Varela on this issue, but then the issue arises as to what a social system is, if it goes not have a clear boundary.

The genesis of social systems. In spite of any issues about where the boundary of a social system may lie, Maturana proposed a generative mechanism for social aggregates, but it is not an explanation of social life that would satisfy most social scientists. He revisited this issue

quite recently and claimed that social scientists need greater precision in their meaning of the word 'social.' He noted that different animals coexist in different degrees of closeness or distance, and that we have different terms to distinguish these degrees. Maturana (2015) offered the examples of 'symbiosis,' 'parasitism,' 'colonies,' and so forth. He further noted that the different manners of coexistence involve different biological processes (such as 'trophilaxis') depending on the animals' structures. Moreover, these manners of living also involve different relational habits and emotions, and we have terms for those too, such as 'domination' or 'collaboration.'

Maturana's straightforward claim has been that love is the generative mechanism that has allowed humans to live in sufficient proximity to develop language, and the degrees of coordination that language allows. According to Maturana's unique definition, *love* means creating legitimate space for the coexistence of another [CFTC video, 1986]. Building on this claim that love is what keeps humans in close enough proximity to exhibit social phenomena, he said, "I feel that I do not fully understand what is the actual concern of sociologists," (2015, p. 179). He added that the concern of sociologists should be to grasp "the origin of the rational-emotional contradiction that has interfered with the conservation of the basic harmony of our social existence in the loving relation of collaboration and mutual care that was the ecological organism-niche unity in which we arose" (p. 179). I will briefly touch on one last concept in his theory that contributes to an understanding of how humans have achieved the ability to operate in complex domains of shared consensus.

Structural coupling. Cells are not that interesting for most social scientists, except, perhaps as metaphors. It is living, *languaging* systems are the unit of interest for social

scientists. Maturana's generative mechanism for language was the same as the mechanism he proposed for the entire history of evolution. He called this *structural coupling*.

Co-determination. Maturana used structural coupling to explain what happens when there is a relationship of ongoing interaction between two or more dynamic systems (Dell, 1985). According to Maturana and Varela (1987), an organism and its environment "act as mutual sources of perturbation, triggering changes of state. We have called this ongoing process 'structural coupling'" (p.99). Thus, they 'select' or condition each other throughout their co-development, rather than one or the other having primacy (Gumbrecht, Maturana, & Varela, 2006). This idea is very important in terms of its paradigmatic implications because it suggests that reality neither preexists those who distinguish its features, nor is the act of making distinctions a purely solipsistic affair. Rather, neither subjects nor objects have primacy: they co-determine and condition each other through a history of mutual selection.

Language. Now, an organism's environment does not exhibit operational closure, because it is not an autopoietic unit in the molecular sense (that only applies to cells, and entities made up of cells). However, this environment does contain other autopoietic units that exhibit operational closure. These systems, particularly if they have nervous systems, are highly plastic, and consequently have a broader domain of possible states. If animals with plastic nervous systems interact recurrently, they may become coupled and evolve some exceptional capacities, such as the human capacity for language (Maturana & Varela, 1987).

Maturana and Varela (1987) have called language coordination of conduct about coordination of conduct because humans are able to coordinate themselves on multiple levels at once. For example, humans can coordinate non-verbally using gestures. When they add language to this layer of coordination, they obscure the fact that they are agreeing both about the

actions necessary to coordinate the tasks, and the meaning of the words used to signify the tasks. Thus, beings that use language are coordinated recursively.

Summary. We have arrived at the point I began with. Building on Keeney's initial quote about higher orders of feedback: humans require coordination and consensus for their survival, language is essential for achieving both, and these very issues are at the heart of change processes in psychotherapy. These points are widely accepted, but the ontology that underscores them, and the implications, are anything but mainstream. I will discuss the implications of this for applied practice further in Chapter VI. In the meantime, I have explained my understanding of the basic ontology regarding living systems from the cellular level, through to social aggregates, disseminated in Maturana and Varela's work. I will next discuss some theoretical implications.

Theoretical Implications of Maturana's Ontology

As Dell (1985) noted, Bateson is generally credited with doing most of the foundational work in articulating a cybernetic epistemology, but his 'paradigm' seemed to be missing a corresponding ontology. The question arises as to what paradigms are used for at all, if knowledge is simply, effective action. Of course, doing something effectively often involves acquiring technical knowledge, but why go to all the trouble of formalizing different systems of technical knowledge into something called a paradigm?

A *paradigm* has been described, variably, as "a framework or philosophy of science that makes assumptions about the nature of reality" (Glesne, 2011, p. 5) and as "a basic set of beliefs that guides action" (Guba, 1990, p. 17), among other definitions. Either way, while an individual's worldview may be acquired passively as an artefact of socialization, paradigms are philosophies of science, acquired deliberately through study, and shared by particular scientific

communities. Paradigms seem to have developed as a method of lending legitimacy to what is discovered (if you identify as positivist) or invented/co-constructed (if you identify postmodernist). They are also used to organize (effective) action – according to the criteria of validity shared by the scientific communities that adopt them.

While my experience with Master's level curricula is limited, I do have some experience in teaching assistant roles, in different programs, at different institutions. My hunch is that students of social science follow a typical trajectory in acquiring a paradigm. First, they learn about the ones disseminated in courses on theory and research methods, typically: positivist, post-positivist, and postmodern paradigms. As a starting point, they learn about the ontological assumptions of each one. Roughly, the respective assumptions of these paradigms are as follows: (1) there is an objective reality that we can discover; (2) there is an objective reality, but we can only know it approximately; and (3) there is no reality apart from that which is socially constructed in a manner that is, necessarily, locally-situated and discursively-constrained.

After discussing these options in rather superficial ways, students are essentially invited, often in methods courses, to pick one that resonates for them, and read about the epistemologies that correspond to the foundational assumptions they are choosing to make about the nature of reality. However, in addition to acquiring research skills, many students of social science are also looking to *practice* something, which requires applying paradigmatic assumptions in their domain of practice. My experience is that students of an applied social science (psychology, social work, et cetera) are presented, in one way or another, with an overview of a debate that has been flourishing for decades, pertaining to the status of 'objective reality.'

It is common knowledge that the positivist tradition – which is dominant in the helping professions that are oriented to the bio-chemical level of human functioning – not only assumes

that reality can be observed directly by an unbiased observer, but demands objective methods in research design. Meanwhile, those fields and professions oriented to the impact of sociocultural factors on human functioning tend to position themselves within a postmodern tradition. There are multiple postmodern traditions (as I will touch on shortly), but a commonality in all of them is a general emphasis on knowledge as being constructed, versus discovered, as well as a critical relationship with the positivist notion of 'objective reality' (Clarke, 2005; Gergen, 2009; Glesne, 2011).

I believe postmodern thinkers dislike the notion of objective reality because it is well understood proponents of this philosophy that if we treat social phenomena (such as racial categories) like *objects*, or discoverable, reified entities that exist independently of us and are therefore immutable, the consequences can be devastating for persons. The consequences are summed up in the catchall: *oppression*, which is basically an organizing device for the various 'isms' that derive from acting as though the categories by which we perceive persons are real, stable, static, and enduring.

Psychology, of course, sits at the interface between these two perspectives and deals with phenomena that are conditioned by both bio-chemical and socio-cultural levels. What I have observed from my fellow students in counselling psychology and clinical social work programs throughout this educational journey is that many of them seem to adopt a postmodern paradigm position that appears to be rooted in a desire to avoid being 'an oppressor' more than being rooted in a truly integrated philosophical stance. As they might word it, they wish to avoid being recruited into master narratives about how people should be, and the overall project of labelling and pathologizing persons.

That sounds rather noble, but many times I have heard my peers, and even our mentors, say that there is no such thing as objective reality. Consequently, it is my hunch that most students of social science may not be able to explain what objects are if there is no objective reality, but they also do not see it as an important issue. The important business is that of counteracting pathologizing discourses, not of figuring out whether the table in front of them exists or not. In other words, they seem to care much more about the consequences of the distinctions we make collectively, not the basis for the distinctions. This position is summed up beautifully in the Chicago School of Sociology's edict, "situations defined as real are real in their consequences" (Clarke, 2005, p. 7).

It would be my position, then, that the relationship between 'reality-out-there' and 'reality-in-here' is, generally speaking, not elucidated very well at the undergraduate or Master's levels. Rather, most students seem to be presented with dichotomized either/or choice regarding the status of objects and the nature of reality. I am not sure if this matters or not, but I am most certainly curious what we are limited from doing if we do not better understand the relationship between 'out-there/in-here.'

The beauty of Maturana's theory is that it gets around this tendency to dichotomize subjects and objects by proposing explanations for how both arise co-dependently through a history of drift. His notions of structural coupling and operational closure are particularly serviceable in terms of explaining the relationship between 'out there/in here.'

The limit of operational closure, however, is that it applies only to autopoietic systems (individuals), not to social aggregates. Consequently, it is not sufficient to explain what happens to individual realities when they happen to coalesce into social norms which may or may not underwrite 'effective action' in complex domains of social action. This process, in my view, is

not well understood. For example, it could easily be argued that we humans are successfully undermining our own survival as a species, and while we do show some awareness of this, we have a great deal of trouble coordinating ourselves to affect change in this domain. There seems to be a question in here somewhere about how to transcend the limits of operational closure. With those considerations in mind, I would like to turn to epistemological considerations for understanding change processes in systems, with a focus on cybernetic epistemology.

Cybernetic Epistemology

Cybernetic epistemology has the distinction of being a kind of awkward (yet welcome) imposter on the paradigmatic landscape, because it emerged as a way of knowing that did not seem to correspond directly to a specific academic tradition or 'scientific community,' so much as a clinical one. According to Hoffman (1985), it started off simply as 'cybernetics,' which in the applied sciences, was the study of systems that self-correct by using feedback.

For instance, in the hands of military engineers during the cold war era, cybernetics was a useful way to think about how to guide a missile toward a target by incorporating feedback into the missile-system about the position of its (moving) target. Psychologists were involved in this project too: witness B. F. Skinner using his conditioning experiments to train an entire flock of pigeons to guide missiles by pecking at a screen, and then attempting to pitch this flock to the U.S. government as a defence technology (Feist & Feist, 2009).

The 'epistemology' part was tacked on to 'cybernetics' by the MRI group of family therapists, as well as a quantum physicist from Harvard (Heinz von Foerster). Hoffman (1985) documented the MRI group's project of shifting the focus from the first-order cybernetics of *observed* systems (such as missiles) to the second-order cybernetics of *observing* systems (such as humans). Whereas positivism has been the dominant paradigm in the physical sciences, and

postmodernism has been the dominant in most social sciences, cybernetic epistemology has been to academic science what a dangling modifier is to grammar. Family therapy clinicians made use of it, but family therapy was a sort of dangling modifier of its own. While there may be traditions in some regions such as 'family social science' (at the University of Minnesota) or 'family psychology' (APA division 43), what particular mainstream science or combination of sciences – such as psychology, sociology, anthropology – did it correspond to?

While Bateson (1972) drew upon anthropology and anatomy, family therapists have come from a full spectrum of professional practice ranging from bio-medical specialties (such as psychiatry and nursing) through the socio-cultural sciences such as sociology. It is perhaps not surprising, then, that some authors, particularly those who champion the cause of Empirically Supported Treatments (ESTs), have at times been quite colourful in their critiques of family therapy. In the words of Sprenkle and Blow (2004), "family therapy began as a maverick discipline, which was oppositionally defiant to the prevailing therapeutic zeitgeist" (p. 115). These authors asserted that marriage and family therapists have largely ignored empirical findings about the common factors, and decried a lack of solid research evidence. They located the impetus for the growth of the field in its intuitive appeal, rather than its evidence base.

Regardless, a reinvigoration of cybernetics should be welcome in the current climate. I will contextualize why this might be so in Chapters IV and V, but for now it is worth mentioning that, as with Maturana's work, a barrier to wider applications of the ideas of cyberneticians may have to do with their use of complex constructs and laborious language. Indeed, cybernetic philosophy has been dismissed by some as "epistobabble" (Coyne, 1982; or see Hoffman, 1985). Nonetheless, there is plenty here that can be of use.

Definition

In basic terms, *epistemology* specifies "how particular organisms or aggregates know, think, and decide" (Bateson 1979a, p. 228, cited in Keeney, 1983, p. 13). As mentioned, *cybernetics* is concerned with systems that use feedback. Merging these two notions results in *cybernetic epistemology,* which refers to the study of feedback rules that govern cognition.

In its second-order form, cybernetics becomes a theory of knowledge shared by living systems that operate using language (observers). Because the use of language requires consensus about meaning, language is a fundamentally social activity that applies to observing systems *in aggregate forms*. For this reason, I would contend that cybernetic epistemology is essentially a theory of knowledge that acknowledges the operational closure of living systems, but seeks to understand how such systems manage to coordinate their actions in spite of their limitations. Consequently, this approach to explanation may have something to contribute to an understanding of how individual realities interact in social domains, and how agreed-upon realities at aggregate levels may or may not underwrite 'effective action' in complex domains of social action.

In Bateson's (1972) parlance, this branch of epistemology is focused on "matters of form rather than substance" (p. 11). It is different from systems theory proper, which is concerned with changing the lens from parts to wholes in systems (which may or may not be living), in that it is a jump from a paradigm of things (material), to one of pattern.

Paradigmatic considerations. Conversely, the aforementioned epistemologies (positivist, post-positivist, and postmodern) that have dominated the natural and social sciences focus on matters of substance, rather than matters of pattern or form. Those paradigms are largely preoccupied with the world of objects, though they are founded on different assumptions

regarding the objects themselves, and the degree to which humans can be objective. Postmodernism is really an umbrella term for paradigms that are 'not positivist,' and which share the assumption reality does not involve a discovery process. In the postmodern view, reality is a construction (Gergen, 2009).

Postmodern paradigms differ, however, in where they locate the construct. Constructivists, for example, draw heavily on the work of Jean Piaget and see reality as an intrapsychic construct that is 'invented' as a result of comparisons to previous experience (von Glaserfeld, 1984). The assumptions in this paradigm about how objects arise in human cognition can be quite convoluted. Kauffman (2003) for example, discussed Heinz von Foerster's "magic trick of convincing us that the familiar objects of our existence can be seen to be nothing more than tokens for the behaviors of organisms that create stable forms" (p.71). In this theory, objects are "tokens for eigenbehaviours" (Kauffman, 2003, p. 76) that arise in cognition through a recursive, mathematical process. I am not sure what exactly this means, even after reading Kauffman's article, but my point is that the constructivist account of objects is convoluted.

Social constructionists, meanwhile, tend to draw (directly or indirectly) on the assumptions of Chicago School sociologists, Herbert Blumer and George Mead, who are known for their theory of symbolic interactionism. Social constructionists assume that knowledge is constructed in a process of social interaction, and that objects arise through shared consensus, achieved using language (Gergen, 2009).

In Keeney's (1983) description of cybernetics, he eschewed the modern/postmodern dichotomy by shifting the focus from the question of how objects, including abstract constructs like social categories, arise in our perception. Instead, Keeney emphasized cyberneticians' interest in knowing, (basically, in my reading), 'in what ways do lives and societies become

patterned if individuals or groups punctuate their experience this way or that?' and, more importantly, 'what is an ecologically sound way of punctuating experience?'

As such, I would suggest that cybernetics offers a metaperspective that can potentially be used to navigate problems that arise in the course of disciplinary disagreements over the nature of reality. This is precisely how it has been used in family therapy. I will next discuss in greater detail the themes in Keeney's (1983) book.

Important Concepts in *Aesthetics*

As mentioned, early theorists on the topic were particularly interested in self-regulating systems and their mechanisms. The concepts in Keeney's (1983) book that were most thematic, in my view, and perhaps the most relied upon in family therapy, were *recursive feedback, habits of punctuation, logical typing, double descriptions,* and *observing systems*. I will define and discuss the relevance of each of these terms.

Recursive feedback. A fundamental notion in cybernetics is that of *feedback*, which is a process by which the results of past performance are 'fed back' into a system. In self-regulating systems, feedback affects performance. At times, however, systems may demonstrate clumsy or maladaptive performance when feedback is inadequately structured (Keeney, 1983). This happens frequently in human systems that are oriented to maximizing a certain variable. In this case, *a positive feedback loop* is having the effect of amplifying deviation. Keeney offered the example of the runaway wealth of an oil baron.

However, an essential thesis of cybernetics is that complex systems involve a hierarchical arrangement of recursive orders of feedback. Keeney illustrated this idea through the example of the heating system. Such a system is self-regulating in that the system monitors its own performance and self-corrects, according to its calibrated thermostat. The system maintains a

range of fluctuation around some homeostasis. With a furnace, however, a resident adjusts the thermostat, and this resident is also subject to higher orders of feedback such as hydro bills, and above that, climate. Because feedback in nested in a broader ecology of systems, Bateson (1972) claimed that, while deviation can sometimes amplify, feedback is always eventually negative, meaning that amplified deviation will always, eventually, be corrected by the ecosystem.

In living systems, when the results of performance fed back to the system change the pattern of performance, learning is said to have occurred. Thus, contexts such as therapy, in which learning and change take place, are concerned with generating alternative forms of feedback. There are several considerations here.

Habits of punctuation. According to Keeney (1983), the task in cybernetics is to orient feedback to the way a particular system (organism, family, scientific community, etc.) specifies and maintains habits of punctuation. Habits of punctuation are similar to what Maturana meant by distinctions, but they are habitual, patterned ways of slicing up the flow of experience into meaningful chunks. In basic terms, then, studying the ways people punctuate their experience becomes a method for identifying their epistemology – or the rules governing their cognition – because their habitual patterns of punctuation embed certain premises that guide the slicing, whether consciously or not.

Distinctions. The process of coming to know a system's habits of punctuation (be it in individuals, families, or larger groups) begins with discerning their distinctions, or ways of pulling out units of meaning from an undifferentiated background. According to Keeney (1983), "description is secondary to the act of having obeyed a command…for drawing a distinction" (p. 20). Therapists, however, must have ways of punctuating clients' punctuation, which means the therapist requires and arsenal of categories that are more abstract.

Logical typing. Logical typing was Bateson's method for teasing apart the levels of abstraction inherent in one's attempts to understand pheonomena. This method originated in the efforts of mathematicians to avoid paradox, but according to Keeney (1983), Bateson's intention was not to avoid paradox, it was simply to be explicit about noting differences in hierarchical order (not confusing pages with books, in Keeney's illustration). Bateson's method involved identifying orders of recursion, and his approach to identifying those levels of recursion was to use a zigzag dialectic between form and process spelling out different hierarchies of abstraction in doing so (Keeney, 1983, p. 40).

In this dialectic, simple actions are viewed as being meaningfully orchestrated in particular contexts. These contexts then constitute categories of action, which correspond to Wittgenstein's well-known ideas about language games. For example, categories of action include play, exploration, combat, crime, schizophrenia, and therapy. These categories are then choreographed into even larger patterns of symmetry or complementarity. Bateson (1972) believed that healthy systems maintained a balance between these higher-level patterns. Keeney (1983) claimed that the dialectic reaches a limit "when one encounters the highest order of calibration and feedback" (p. 89), which he defined as *organizational closure*.

He appeared to draw this term from Varela's writings, but this is a slight shift from the language that Varela used with Maturana to describe the *operational* closure of nervous systems. It is perhaps for this reason that Keeney viewed family and social systems as autopoietic, in spite of Maturana and Varela's claims to the contrary. Regardless for the basis of Keeney's view of social systems, he seemed adamant that all systems exhibit closure, and that change therefore cannot come from within the system – hence the need for therapists or other external events/agents to recalibrate systems by somehow altering feedback mechanisms.

Double description. Following Bateson, Keeney (1983) also focused on *double description* as an epistemological tool to deal with abstractions. This particular tool simply involves combining the views of individuals. This strategy enables one to discern patterns of relationship within a system, rather than seeing descriptions as statements of fact about individuals and objects. A goal of cybernetic therapy is to avoid being trapped in an ephemeral hunt for what is more true or more correct. Instead, therapists operating in this tradition will seek multiple views of a situation, and will try to fuse the various descriptions into a higher-order logical type.

There are several methods for generating double descriptions. Tomm (1988) has written about the technique of circular questioning as a means of helping family therapists 'see' the cybernetic complementarities in family members' patterns of interaction. Similarly, White (1986) described a number of techniques for generating double descriptions.

Theoretical and Ethical Implications of Cybernetic Epistemology

Keeney and other cyberneticians' claim was that erroneous habits of distinction and description are culturally prevalent and wreaking ecological chaos from the level of individual minds, all the way up through every corner of the ecosphere, and they located at least part of the trouble in a poor understanding of the role of the observer. The difference between observed and observing systems, or between first- and second-order cybernetics is that in the latter case, the observer is not separable from who or what he or she is observing.

Given observers' limitations, both Keeney (1983) and Tomm (1991) have encouraged therapists to be aware of the distinctions they draw, with what intentions, and also to be mindful of the effects. In essence, humans have a tendency to confuse description with ontological

reality. The antidote, in these theorists' view, is to develop a better awareness of the distinctions we draw, as well as how, and with what intentions, we came to draw them.

Keeney invited therapists to remember, too, that any linear or objective descriptions are only approximations of larger patterns. Similarly, Hoffman (1985) mentioned that "nonneutral, 'linear' attitudes and actions are often: 1) necessary, 2) appropriate, 3) what you are being paid for…The only rule is to be clear about which hat one is wearing, a social control hat or a systemic change hat" (p. 394). Being mindful of in this way, in Keeney's view, amounted to an embodied awareness of higher order levels of feedback.

A theory of form and process. An important idea Keeney disseminated, which I agree with, is that epistemological premises can and should be critically examined with respect to their ecological consequences. Cybernetic epistemology proposes that we concern ourselves with the consequences of particular habits of punctuation, and embrace distinctions that are more ecologically nested than traditional dualisms such as *a*/not *a*, good/bad, predator/prey.

Keeney referred to these kinds of dualisms as Hegelian pairs, and following Varela, proposed that we look instead for 'the it' / 'the process leading to it' as a means of distinguishing higher orders of process. The dualism of predator/prey, for example, can be reframed as ecosystem/species interaction. It is important to make higher-order distinctions if the goal is to coordinate behaviour within a sustainable ecology where homeostatic deviations are not being amplified to the point of ecological disruption. In the predator/prey example, humans have at times sought to drive certain species (such as wolves) out of ecosystems. The effects have been illustrated using time-lapse video Youtube. Presumably, these videos could serve as an analogy for what happens in human social systems when feedback patterns are poorly calibrated.

Ethics. Keeney wrote, "from an ethical perspective we do not ask whether we are 'objective' or 'subjective.' Instead, we recognize the necessary connection of the observer with the observed, which leads to examining *how* the observer participates in the observed" (p. 80, italics in original). Keeney placed the onus of describing the observer on the biologist, so perhaps not surprisingly, second-order cybernetics "has been developed largely by biologists" (p. 82), namely, Maturana and Varela. Indeed, from all of his research over the years, Maturana (2015) distilled some basic biological 'facts' (as he called them) about humans: Firstly, "we cannot know that which we, calling valid at any particular moment in the experience of what we live, shall devalue later as a mistake or illusion or shall confirm as a perception," because secondly, "we cannot claim to be able to say anything about anything that we distinguish as if [it] had any property or feature independent of [our structures in the moment we distinguished it]" (p. 176). These biological 'facts' lead to a certain choice.

Attitudes of the observer. Maturana has distinguished two possible ways of dealing with objectivity, with two corresponding 'ways of being' that result. He called these attitudes of the observer and labeled them *objectivity*, and *objectivity in parentheses*. Mascolo (2011) described the differences in some detail. She noted that the path of objectivity, in which objects exist independently, creates the possibility of external validations of statements and evokes an emotion of authoritarianism, coupled with demands for submission, no matter how subtle. Moreover, people are "required to behave according to pre-given rules and so are not responsible for the consequences of their actions" (p. 376).

On the other hand, if we accept that our models of reality are largely generated internally, then we are liberated from emotional conflicts over who is 'right' and we are free to develop choices and preferences based on ethically-aware reflection on consequences of our choices.

Gash (2011) suggested that a fundamental task of attitude research should be figuring out how one switches from one position on reality to another. He lamented that "the challenge is to persuade people with different views that there is value in discussion" (p. 365).

There seems to be an implication in all of this that once humans understand how we do what we do in the act of observing, collective responsibility follows naturally. Indeed, regarding Maturana's work, Gash (2011) noted that the implications for our relations with each other are "a central recurring theme in his work and one that has potential implications for conflict resolution at the interpersonal level and for the development of ecological responsibility at the level of society" (p. 364).

Responsibility. As it turns out, I wrote a paper for Dr. Tomm's class that attempted to extend Maturana's theory into the social domain, and the thesis of that paper was highly resonant with Mascolo's statement regarding ecological responsibility. The paper was organized around the question of effective action in complex domains involving social aggregates. Particularly, I was interested in the notion of effective action in the domain of species survival.

One of the concerns I discussed in that paper was the same one I have mentioned here, that students of social science do not seem to develop a sophisticated understanding of the relationship between 'out there/in here.' I added that part of the reason for this is that paradigms are only taught along the lines of ontology, epistemology, and methodology. However, as some have noted, just like the worldviews of lay people, philosophies of science also contain an *axiological* dimension, which carries implicit notions about ethics and aesthetics (Hedlund de Witt, 2012). This term is absent from the glossaries of the text books used in my advanced methods course. One of my critiques of instruction in applied social sciences is that students are not well equipped to deal with issues of conflicting values rooted in assumptions about 'oughts.'

We seem to be much more fluent in navigating conflicts over what 'is.' I linked this to the privileging of the ontological, epistemological, and methodological dimensions of paradigms.

Dr. Tomm generously extended me an opportunity to join him in the class the following year as a teaching assistant. Additionally, he invited me to help him edit the lecture on Maturana's theory of knowledge to incorporate a discussion of the axiological dimensions of the paradigms we discussed. In that same lecture the following year, we sought to also address the following axiological question in relation to each paradigm: "What is considered 'good,' 'better,' or 'bad' (within this paradigm) and how should we create, manage, and change our relationships with each other within this 'reality'?" Additionally, we added a practical/political question: "What are the possible, probable, and improbable ramifications of this paradigm in actual patterns of professional practice?"

Our hope was that by increasing the focus on the axiological dimension and the political implications of any paradigm, students of applied social sciences could experience increased options for navigating situations dealing with culturally normative values that may be problematic at some level, but which may also be fused with nebulous social justice considerations. I will discuss our tentative answers to these questions in Chapter VI, when I attempt to integrate this work as a whole, and to articulate implications for counselling practice.

Considerations for practice. For now, it will suffice to say that the need to find ways to think about ecological considerations in our everyday practices has never been more relevant, because the global community is on the brink of a major shift. Between the climate, emerging technologies, and geopolitical strife in countless domains, it would not be outlandish to suggest that therapists, and change facilitators in related disciplines, are likely to be dealing increasingly with problems related to 'negative feedback corrections' stemming from higher nested orders

within the overall ecology in the coming years and that they will need methods for navigating this. Interestingly, Davey, Duncan, Kissil, Davey, and Stone Fish (2011) insinuated a leadership role for therapists when they noted, "careful study of change in the context of family therapy provides an opportunity to inform the study of change in other…disciplines" (p. 73).

The Methodology of Facilitating Change in Systems

> "Your action is revealed as part of a more encompassing ecological dance. Family therapy then becomes a crucible for the drama of life and mind" (Keeney, 1983, p. 108).

As previously mentioned, Watzlawick, Weakland, and Fisch (1974/2011) wrote a book about change processes in systems. These authors were clinician-researchers at the MRI, and as such, they were interested in process over content, and the here and now rather than the past. In fact, they managed to paint an immense parcel of therapeutic wisdom as irrelevant simply by citing the existence (and commonality) of spontaneous change as sufficient evidence that past causes could be left unexamined when seeking change. According to them, "very few behavioural or social changes are accompanied by, let alone preceded, by insight into the vicissitudes of their genesis" (p. 83).

This view carries some clout given that in the current non-systemic catchall theory of change – the common factors model – 'client factors' account for 40% of the variance in outcome (Asay & Lambert, 1999). These authors claimed that "the subject of client variables and extratherapeutic events and their relation to outcome could fill a volume," (p. 30) but they noted some common variables used to describe client factors in the literature. These included severity of disturbance, motivation, capacity to relate, ego strength, psychological mindedness, and the ability to identify a focal problem.

Mathematical Analogies Applied to Types of Change

Regardless of one's beliefs about whether understanding the past is relevant to change processes, *Change* is a seminal investigation of change processes in systems, and the authors have been highly influential in family therapy theory and practice. Watzlawick and colleagues (1974/2011) drew heavily upon two theories of mathematical logic to explain what they had learned about their own therapeutic processes: The theory of groups, and the theory of logical types. These theories come up elsewhere in theoretical writings within the social science literature, particularly where the authors are dealing with social systems or group therapies of some kind (see Holzman, 2011; Newman, 2003; Znaneicki, 1934).

The theory of groups and first-order change. The *theory of groups* deals with the theoretical consequences of the properties of groups. According to this theory, any group (of numbers) has four basic properties: (1) it is composed of members that are alike on one common characteristic; (2) one may combine the members in any sequence (according to a certain rule such as addition or multiplication), but the outcome remains the same; (3) it contains an identity member such that this member's combination with any other member maintains that member's identity (e.g. 5 x 1 = 5, where multiplication is the rule); and (4) every member has an opposite, and the combination of any member with its opposite gives the identity member (e.g.: 5 + (–5) = 0, where addition is the rule). It is important to note that numbers have different effects on other numbers depending on the rules for combining them. This mirrors the idea within cybernetics that there are rules governing cognition and patterns of feedback in living systems.

Watzlawick and colleagues (1974/2011) proposed the theory of groups as a useful framework for thinking about how systems can vacillate around a homeostasis which is either adaptive or problematic; in other words, how systems can change without changing. Applied to

humans, any ongoing patterns such as nagging wife/withdrawing husband would be an example of systems where people do things (the system vacillates), but nothing changes. Watzlawick and colleagues called this kind of change *first-order change*.

In order to explain first-order change processes, they noted some interesting facts about groups of numbers, and drew corresponding analogies with human systems. For example, the authors stated, "as a basis for action, tradition [can be] considered as having the function of an identity member" (p. 22). They also highlighted the simplification of complex issues as having the effect of an identity member in that the problems remain unchanged due to the 'wrong' solutions being applied.

Taken together, the four group properties essentially delimit the possible internal changes a system can undergo. Note the similarity between this description, and Maturana's notion of structure determinism. A system can undergo many different quantitative changes (say, in temperature, in symptom severity, and so forth) while still maintaining some kind of homeostasis. The system cannot, however, produce the rules for changing its own rules. Drawing upon Wittgenstein's terminology about language games, Watzlawick and colleagues (1974/2011) referred to systems stuck in first order processes as being in a *Game Without End*.

The theory of logical types and second-order change. To conceptualize the types of changes that fundamentally transform a system, Watzlawick and colleagues (1974/2011) used Bertrand Russell's *theory of logical types*. The original use of this theory was to avoid the problem of self-referential paradox (Newman, 2003; Keeney, 1983). This is not a theory about what goes on inside a class, between its members; it is about the relationship between member and class. Watzlawick and colleagues considered Bateson's greatest contribution to the behavioural sciences to be his introduction of the theory of logical types into the field because

qualitative systemic shifts involved, in their view, the movement of systems among logical types. Batson himself was quite adamant about this theory's importance. He claimed, "insofar as behavioural scientists still ignore the problems of *Principa Mathematica*, they can claim approximately sixty years of obsolescence" (1972, p. 279).

Watzlawick and colleagues (1974/2011) used the term *second-order change* to describe such shifts in logical types. They offered various anecdotal examples of spontaneous change and concluded that: "in each case the decisive action is applied (wittingly or unwittingly) to the attempted solution – to that which is being done to deal with the difficulty – and not to the difficulty itself" (p.79). As a result, the techniques of second-order change deal with attempted solutions and their effects, and not with their presumed causes. The crucial question became *what*? rather than *why*? Specifically, Watzlawick and colleagues asked: *what* is being done here and now that serves to perpetuate the problem, and what can be done to change this?

Techniques. Once the attempted solution is discovered, a primary technique of second-order change facilitators involves *reframing*, which means altering the conceptual or emotional setting of the experience and placing it in another frame which fits the facts of the situation equally well, or better. What changes is the meaning attributed to the situation. Reframing in this sense means shifting an object from one class to another *equally valid* class. This process does not produce insight, but teaches a different 'game' that makes the old one obsolete. Following cybernetic systems theory, the meaning intervention comes from outside the system, be it through a chance event, a therapist, or whatever.

When the theory of logical types is applied to humans, classes are viewed as exhaustive collections of members which have specific characteristics common to all of them. However, membership in a given class is rarely exclusive, yet, once an object is conceptualized as the

member of a given class, it is extremely difficult to see it as belonging to another class as well. Additionally, what we distinguish as a 'class' is of a different logical type than the member objects that make up the class because classes basically amount to opinions about objects, and are therefore at the next higher logical level. Since classes are not tangible objects, but constructs of our minds, the assignment of an object to a given class is, in these authors' view, learned, or the outcome of choice. I will revisit this issue in Chapter IV.

Implications of the MRI Group's Methodology

The authors' of *Change* essential thesis was that inattention to the difference between the two types of change is common. Moreover, confusion about these issues results in 'wrong' solutions being applied, which tend to compound problems. Systems become stuck in a first-order process and the structure of the system remains invariant. This stuckness is often a result, they argue, of failing to distinguish between difficulties and problems.

Difficulties arise as a result of deviation from a norm (such as temperature) and constitute an undesirable state of affairs (like being cold) that can be resolved through common-sense action. Often, a common sense strategy works, such as applying more layers or burning more furnace fuel when the weather gets cold. *Problems*, meanwhile, are created and maintained through the mishandling of difficulties, either by denying a problem exists, or by applying common sense solutions (typically, 'more of the same' or 'doing the opposite') to problems whose resolution depends on transforming the system qualitatively.

Dilemmas in problem solving tend to result from viewing one alternative (i.e., one member of the class of alternatives) as the lesser evil. Transcending a buffet of solutions where one feels forced to pick the lesser of two or more evils requires an examination of the premises

creating the problem. Failure to examine these premises creates an error of logical typing, and the result of this kind of error is paradox: this is the central axiom of the theory of logical types.

Thus, to understand change processes, according to Watzlawick and colleagues (1974/2011), it is necessary to distinguish between facts, and premises about facts. For example, problems in marriage therapy often have to do with the difficulty of changing the premise on which the relationship was originally based, which is "never the outcome of overt negotiation, *but is a tacit contract whose conditions the partners may be unable to verbalize, even though they are very sensitive to violations of these unwritten clauses*" (p. 71, emphasis added). The necessary change then, has to be the change of the contract itself, rather than doing more, or doing the opposite, of what the contract stipulates. In terms of elucidating the unwritten clauses that underwrite tacit interpersonal contracts, other theorists have taken what Watzlawick and colleagues (1974/2011) began, and have further developed the particulars, as I will discuss in the next section.

To summarize, my feeling in reading *Change* was that Watzlawick and colleagues (1974/2011) had interesting ideas regarding therapeutic practice, but the ideas were somehow lacking in depth and applicability. That feeling is questionable, given that these clinicians were deeply inspired by the work of Milton Erickson, who seemed to have incredible depth and breadth to his practice. However, I feel that these authors have fallen short of offering techniques that amount to more than those of solution-focused therapy, which has its uses, but which also has potential limitations for clients who are experiencing deep emotional conflicts. Moreover, some of the paradoxical techniques they discussed (such as positively connoting the symptom) were interesting, but could be difficult to apply in the context of modern ethics.

Further Development in Systemic Change Theories

Upon further reflection, it would seem that Dr. Tomm has picked up where the MRI clinician-researchers left off, and has built a coherent model of interventions that is learnable and well adapted to the modern context of service delivery. Among many fruitful therapeutic skills and initiatives, not the least of which is his *IPscope model* for assessing patterns of interaction in families (Tomm, Strong, St. George, & Wulff, 2014), Dr. Tomm has also, in my view, developed highly specialized skill in using reflexive questions to shift problematic patterns in family systems. Within his model, circular questions are used to help clinicians conceptualize patterns, whereas reflexive questions are used to invite clients to develop new meanings and relationships with themselves, with each other, and with their problems (Tomm, 1988).

Interestingly, Dr. Tomm developed his model of reflexive questioning by drawing upon the *coordinated management of meaning* (CMM) theory, proposed by Cronen, Pearce, and Harris (1979). According to Tomm (1987), Pearce and Cronen in particular built upon Bateson's applications of Russell's theory of logical types to suggest that human communication involves a hierarchy of levels of meaning. They named six levels, and postulated a circular relationship between the levels, in which feedback influences the meaning at any given level.

Pearce and Cronen's initial efforts involved identifying and describing the rules that organize the process of generating meaning in communication. This project was spurred by their observation that communicative codes vary by culture and that each cultural code has an underlying logic (Cronen, Pearce, & Harris, 1979). They critiqued the Aristotelian version of logic, *enthymeme*, which involved a binary logic for claims about existence (e.g.: "all A's are B"; "if P then Q"). This logic only allowed for an inference of valid or invalid. To understand social

action, they claimed, it is crucial to understand the logic of '*oughtness*' (e.g.: "if A, then B is obligatory, permitted, irrelevant, or prohibited").

Consequently, they developed CMM, which they described in terms that mesh very well with Maturana's notions of embodied action, and domains of consensus:

> The logic of the Coordinated Management of Meaning employs deontic operators and stresses the hierarchical organization of actors' meanings. These features make the logic "practical" in the sense that it stems from and leads to human action rather than simply truth-claims or postulates, and field-dependent in the sense that the reasoning holds only within a specified domain, such as a particular game in a particular community. (p. 24)

Tomm (1987) noted that Cronen and Pearce identified two major categories of rules: regulative rules, which determine behaviours that ought to be enacted or avoided in a given situation, and constitutive rules, which have to do with processes of attributing meaning during interactions. Tomm (1987) described the relevance of CMM theory for therapy in detail, so I will not repeat what he said here, except to note that it was from this theory that he imported the notion of reflexivity to his taxonomy of questions types. He described reflexive questions as "questions asked with the intent to facilitate self-healing in an individual or family by activating reflexivity among meanings within pre-existing belief systems that enable family members to generate or generalize constructive patterns of cognition and behavior on their own" (Tomm, 1987, n.p.).

Following Maturana, Bateson, Keeney, the MRI group, and additionally drawing upon CMM, Tomm (1987) said the following about reflexive questions:

> The questions themselves remain as…perturbations. They only trigger reflexive activity in the connectedness among meanings within the family's own belief systems. This

> explanation acknowledges the autonomy of the family with regard to what change actually occurs; that is, the specific effects of the questions are determined by the client or family, not by the therapist. Change occurs as a result of alterations in the organization and structure of the family's pre-existing system of meanings. Given this formulation, the basic mechanism of change is not insight, but reflexivity. (n.p.)

Tomm's (1987) emphasis on the role of therapists in influencing meaning suggests that psychotherapists are situated in a position that allows them to influence meaning at both individual and aggregate social levels, and they have a responsibility to do so in a way that is as conscious as possible of the consequences at either level.

Summary and Critique

In this chapter, I have reviewed paradigmatic considerations in the works of foundational authors on the issue of systemic change. This discussion began with a consideration of the ontological themes in Maturana's work. Maturana presented a view of cognition as embodied, and a view of reality as subject-dependent, meaning that organisms and environment select and condition each other through a history of structural coupling in the context of evolutionary drift. It was Maturana's view that all systems are structure-determined, and that living systems with nervous systems exhibit operational closure.

Given these biological foundations, I described cybernetic epistemology as a way of delving further into the functioning of observing systems, particularly when they join together at aggregate levels. Drawing on Keeney's (1983) seminal investigation of this topic, I discussed the relevance of *recursive feedback, habits of punctuation, logical typing, double descriptions,* for determining where things can go awry in the functioning of systems, as well as means of calibrating ecologically sound patterns of interaction among observing systems.

Lastly, I reviewed the work of some clinician-researchers at the MRI institute who developed methodological understandings about the facilitation of systemic change. Watzlawick and colleagues (1974/2011) drew upon two mathematical theories: the theory of groups and the theory of logical types to describe two different types of change that can occur in systems – first- and second-order change, respectively. I then critiqued the depth and applicability of the techniques they suggested for facilitating second-order change, and turned to a discussion of more recent developments; namely, CMM theory and its applications for family therapy as described by Karl Tomm.

In all, I would suggest that these paradigmatic considerations amount to a useful theoretical base for understanding bottom-up or biologically-rooted processes in human systems at both individual and aggregate levels. However, this body of theory remains to be integrated with top-down understandings of sociocultural forces in human functioning. My project here is to advance that integration; but I will first discuss the methodology, an adapted form of grounded theory, that will allow me to do so.

Chapter III

THEORY AND METHODOLOGY

> There is clear need for narratives about the processes of change. These narratives are most powerful when they detail the barriers to critical reflection and transformative practice at both the intra- and interpersonal level and when they reflect the issues and challenges of everyday contexts. (Skattebol & Arthur, 2014, p. 363)

In this chapter, I will articulate my use of an adapted form of grounded theory. This will begin with a brief overview of grounded theory along with some detail about how this methodology has been used within this study. Following that, I will discuss some limitations of grounded theory, and will move into a discussion of how the method of analytical induction can be used to address some of those limitations. Lastly, I will specify the relevance of analytic induction for this study, as well as how I used some techniques of this methodology.

Grounded Theory

Two sociologists, Barney Glaser and Anslem Strauss, developed grounded theory through their work with the School of Nursing at the University of California, San Francisco, and published the first book on the topic in 1967. They created grounded theory as a reaction to what they viewed as an overemphasis in social science on the verification of preconceived theories (Glaser & Strauss, 1967). As an alternative, they offered a set of qualitative methods for generating theories inductively from data. Over the years, Glaser and Strauss disagreed on aspects of the method, and Strauss wrote another book with his student, Juliette Corbin. After that, other approaches emerged, most notably the postmodern version of Kathy Charmaz, and Adele Clarke's situational analysis. Thus, there is some variability in how grounded theory is carried out, which can be attributed to its remodeling over time (Maz, 2013).

Regardless, a grounded theory study identifies participants' main concern, as well as their attempts to resolve it, which are captured in a *core category* (Glaser, 2012; Glaser & Holton 2005). This category is a theoretical abstraction that serves an organizing device to integrate the theory. Through theoretical propositions about the relationships between this category and the others, most of the variation in patterns of behavior aimed at resolving the participants' main concern can be explained. Thus, a 'grounded theory' is an inductively generated theoretical explanation of participants' attempts to deal with their main concern (Connelly, 2013).

My own study does not involve 'participants' in the traditional sense because I am analyzing texts: namely, the seminal writings of change process theorists, as well as the recent literature on systemic change processes according to authors from various sociocultural disciplines. Nonetheless, all of these authors share a main concern, which is systemic change. In the next chapter (IV), I will elucidate this 'main concern' for counselling psychologists in particular, as well as their attempted solutions, and will articulate how the attempted solutions are patterned. This will amount to an examination of what is currently happening at the 'interface' between bottom-up attempts to resolve problems in human functioning, and top-down approaches. The following chapter (V); will serve to elucidate other categories that have relevance for the question of systemic change, but which are currently not on the radar for *most* psychotherapists due to a lack of integration with surrounding social science disciplines.

While the methodology may be adapted, certain key methods must be evident for a study to count as a grounded theory. These include: *theoretical sampling*, *concurrent data collection and analysis, constant comparative analysis, coding, memos, a core category,* and *theoretical saturation* (Connelly, 2013). Theoretical sampling is perhaps a defining feature of grounded theory methodology. Rather than discuss each of these as they apply to my study, please see

Table 1 for a summary of these various methods, their features, and examples of how I used them. Within this table, I have either indicated how I used the method, or have detailed which appendices to consult for more detailed examples on how I used that method.

Table 1
Grounded Theory Methods in this Study

Method	Definition	How was it used in this study?
Theoretical Sampling	A process of data collection whereby the researcher jointly collects codes, and analyzes data, which helps to determine where to sample next and for what theoretical purpose (Corbin & Strauss, 2008; Glaser & Strauss, 1967).	I sampled different bodies of literature from different disciplines on the basis of emerging codes. Examples of these codes were 'values,' 'existential,' 'neoliberal,' 'paradigmatic.' Please refer to Appendix A, described below, for a visual sample of emergent codes.
Concurrent Data Collection and Analysis	Data collection and analysis happen through a continuous, back-and-forth interplay where what is learned early on guides the questions that are asked at later points, and emerging theoretical propositions are tested with new data (Corbin & Strauss, 2008; Glaser & Strauss, 1967).	I used a journal to keep track of questions and emerging theoretical propositions. Frequently, I used diagramming techniques to elucidate the relationships among ideas. Appendix A offers a sample from my theoretical journal of my coding and memoing efforts in these diagrams.
Constant Comparative Analysis	A process of reducing data through constant recoding (Glaser & Strauss, 1967). As categories emerge, the researcher compares data in each category to tease out the category's structure, context, dimensions, consequences, and relationship to other categories (Corbin & Strauss, 2008).	Using the iAnnotate app, I highlighted articles and exported the content to a Word document. I then read and annotated the condensed content in the same app, and exported that content. I printed this condensed data and read it a third time, this time using a colour-coded highlighting scheme, and making notes in the margins about emerging codes and their connections with other categories. See Appendix B for a visual sample of this condensed material.
Coding	The researcher applies a conceptual label to a chunk of text to extract significant themes by highlighting problems, issues, and matters of importance in the data.	Please see Appendix C for a summary of the codes and categories that emerged in my analysis of the sociocultural literature. I used the same process to analyze foundational works in Chapter II.

Memos	Theoretical notes about conceptual links between categories. They help guide data collection by presenting hypotheses about relationships in the data (Holton, 2010). They function to keep track of tentative ideas and make the internal dialogue explicit.	I used memoing throughout the process, sometimes in my theoretical journal, but often by using the 'note' function in the iAnnotate app. My memos were then exported as part of the condensed material described under 'constant comparative analysis.
Core Category	Functions to integrate and delimit the theory by explaining most of the variation in participants' attempts to resolve the main concern. It should occur frequently in the data and must relate easily and meaningfully to the other categories (Glaser & Holton, 2005).	The core category took numerous shapes throughout this process, but it became apparent that the core category was a cybernetic complementarity in the profession of psychology's varied attempts to resolve the issue of systemic change. This category is described in detail in Chapter IV.
Theoretical Saturation	The point in analysis when all categories are sufficiently developed in terms of their properties, dimensions, and variation that further data collection and analysis add little to the conceptualization (Corbin & Strauss, 2008).	It took quite some time to achieve theoretical saturation, as it was a long time before I was able to connect the emergent categories in a meaningful way. While it would take a long time to saturate a study dealing with all theoretical phenomena pertaining to change processes in systems, I did reach a point where I could sense some repetitiveness in the data.

Limitations of Grounded Theory

While the grounded theory methodology was very useful in handling vast amounts of theoretical data, classic grounded theory, on its own, is arguably not sufficient to understand social phenomena in a way that is ecologically contextualized. Part of the reason for this is that Glaser and Strauss belonged to the Chicago School of sociology, and they were heavily influenced by Blumer and Mead's theory of symbolic interactionism (Milliken & Schreiber, 2012). Strauss was actually a graduate student of Blumer's. As I have mentioned, this theory places strong emphasis on the social construction of reality through a process of shared consensus, which is mediated by language. Thus, while grounded theory can be very *locally* contextualized, given its strong inductive foundations, it can lack integration with broader bodies

of knowledge. For this reason I view it as useful to supplement a grounded theory analysis with the method of analytic induction, since the philosophical stance I am adopting here is not systemic, but ecosystemic.

Analytic Induction

Analytic induction is another method that originated in sociology (Znaneicki, 1934). It is worth noting that the originators of this method (Florian Znaneicki and Alfred Lindesmith) were also Chicago School Sociologists, in fact, Lindesmith was also a graduate student of Blumer's at the same time as Strauss (Hammersley, 2010). Consequently, there is considerable conceptual overlap with grounded theory, but there are some important differences.

Znaneicki (1934) was the first to articulate the method (Miller, 1982). He began his career in Poland and later immigrated to the United States, where he settled in Chicago. He did not appear to be as heavily influenced by symbolic interactionism; rather, his interest was in adapting methods of analysis from biology (Znaneicki, 1934). Interestingly, Znaneicki's writings shared some striking conceptual alignments with Maturana's understanding of how systems are structured and how they operate, though he differed from Maturana in that he was a champion of objectivity and causation.

Hammersley (2010) contrasted grounded theory and analytic induction and noted that while both methodologies aim to generate theories inductively, analytic induction is concerned with producing universally applicable versus locally-specific theoretical conclusions. More specifically, "the goal of analytic induction is to provide a "universally applicable theory of causes accounting for a specific behaviour" (Glaser & Strauss, 1967, p.104). Most studies using this methodology have proposed theories about some kind of deviant behaviour, such as embezzlement (Hammersley, 2010). Miller (1982) distinguished an Aristotelian flavour to

Znaneicki's logic. He wrote, "analytic induction was believed by Zaneicki to be the ideal method of the social sciences. It was supposed to yield universal statements of the 'all S are P' variety" (p. 285).

I do not plan generate a universal, causal theory, because that is not a fundamental preoccupation for grounded theorists. However, I will approximate this kind of theoretical product in Chapter VI by offering a summary of my work as a set of aphorisms. These might have the ring of universally applicable statements, but it would be more accurate to call them condensed interpretations of recurrent themes in the literature.

Another distinctive feature of analytic induction is that the universal theory or theoretical product "is generated by the reformulation of hypotheses and redefinition of the phenomena forced by constantly confronting the theory with negative cases, cases which do not confirm the current formulation" (p.104). I would argue that my analysis of the broader sociocultural literature is an example of negative case analysis because factors influencing systemic change processes are theorized differently in that literature, and thus, they contribute something to the formulation(s) offered by foundational authors on this topic. There are additional reasons for which I believe analytic induction has some relevance, which I will discuss next.

The Relevance of Znaneicki's Central Thesis

Znaneicki (1934) critiqued the proliferation of social-scientific knowledge without a corresponding organizational structure in place to organize the burgeoning empirical data. He believed that sociology should employ a methodology that is fundamentally similar to that of biology. He claimed that social evolution is similar to organic evolution because just as there was a time when there were no horses or pine-trees, so there was a time when there were no relations of employment, or kings, or university professors, but they all somehow came to exist

(Znaneicki, 1934). He assumed that the process of phylogenetic drift that brought organic entities into being was conceptually similar to the process of historical drift that has produced cultural phenomena. In Maturana's theory, that process is structural coupling. Following Znaneicki and Maturana, I will attend to the processes involved in conditioning ideological (versus biochemical) 'medium' in which humans operate. Znaneicki (1934) offered some ideas on how such processes might be elucidated.

Structural dependence. Znaneicki's methodology is rooted in an assumption of structural depedence (Znaneicki, 1934), which bears striking resemblance to Maturana's notion of *structure determinism*. While Maturana was condered with biological systems, and Znaneick was concerned with social systems, both theorists assumed the composition of a system is determined by its structure.

Ontogenetic analysis. In Znaneicki's theory, since all elements are interconnected, there must be a gradation of importance such that some are structurally dependent on others. Discovering this gradation of importance is what allows the researcher to know they have extracted the essential characteristics of the system for the purpose of classification (Tacq, 2007). Znaneicki (1934) touted analytic induction as a method for discovering this. His claim was that:

> Structural dependence must be sought…between those elements which in the course of the system's construction are primarily selected and determined as its components, and those which are added later. Analysis of systems…must be ontogenetic analysis. (p.276)

To illustrate ontogenetic analysis, Znaneicki (1934) offered the example of studying the various stages of development in a mammal's foetus. He noted that historians describe social systems in terms of their gradual becoming. Znaneicki urged social scientists to classify types, but also to take their analyses beyond simple classifications. I will discuss these ideas further.

Classification of types. In analytic induction, the product of phylogenetic and ontogenetic analysis is a classification of a system, which is named as a particular *type* of system. Some classifications, in Znaneicki's view, are worth more than others because they orient us to elements that are more determining of the system's structure than others. In biology, for example, it is more worthwhile to classify animals according to whether they are vertebrates than according to their colour. This implies that, as with the class *vertebrates* in life sciences, types of systems should also be named when distinguished by a social scientist. We do this sometimes, as when we talk about families, socio-political, or therapeutic systems.

Causal analysis. However, in addition to seeking a classification of types or taxonomy, Znaneicki (1934) was interested in a more in-depth analysis that accounted for how the specific types came to be. It would seem that Znaneicki was looking for causal factors that influence the evolution of different types of social systems. Indeed, Znaneicki proposed that: "against the ontogenetic and phylogenetic studies where the composition and structure of the system are viewed as internally determined…causal studies must take into account such processes as are found when unintended external influences affect systems" (p. 295). This idea resonates with the cybernetic notion that systems cannot produce the rules for their own transformation; a change in the structure of the rules must be catalyzed by something outside the system (Keeney, 1983; Watzlawick et al., 1974/2011).

Causal factors that affect the evolution and development of social systems were a central preoccupation for Znaneicki, but he defined causality in a unique way. He began by offering a distinction between two possible meanings of the word *stimulus*: (a) experiences which release tendencies that were previously prevented from being active by some constraint, and (b) factors

which interfere with active tendencies. He claimed that only the latter kind can cause changes in systems. It would seem he viewed such factors as integral to processes of second-order change.

Axiological impediments. In the first case, the system becomes actualized owing to a release of impeded activity; in the second, the system experiences what he called an *axiological impediment*, which occurs when values within a social system conflict with values external to the system. His claim was that "noting can change the system as a whole which does not irremediably conflict with the original significance of its values" (p. 297), and that the system eliminates the conflict of values by substituting a different structure and composition. Similarly, he asserted, "the changes of systems which demand causal explanation always result from axiological impediments. An axiological impediment…makes some of its essential values axiologically conflicting, incompatible with one another " (p. 299). Essentially, then, Znaniecki was suggesting that influences external to systems affect processes in a cause-and-effect manner through axiological impediments, or value conflicts.

Analytic Induction Applied to This Study

Znaneicki (1934) proposed a four-step procedure for analytic induction which involved discovering a system's characteristics, abstracting them, hypothesis testing through negative case analysis, and establishing a classification. I have not followed that procedure. Rather, I have used grounded theory methodology to discover categories and relationships among categories in the data; yet, I have also borrowed some techniques of analysis from analytic induction that would seem to support the elaboration of a more ecologically valid (rather than locally situated) theory of change processes in systems. Specifically, I have used techniques of analysis that will ground the overall product in the paradigmatic considerations discussed in Chapter II.

Znaneicki's methodology – because of its theoretical alignment with Maturana's ontology and some aspects of cybernetic epistemology – facilitates this.

Rather than make a table to demonstrate how analytic induction has been used in this study, analogous to the depiction of grounded theory in Table 1, I will simply note the following: (1) From the perspective of the bottom-up theories that have, thus far, contributed to understandings of systemic change in psychology, Chapter V can be read as an analysis of 'deviant' cases; (2) three categories emerged in the analysis of the sociocultural literature that incorporate a classification of types (individual and aggregate self-systems), as well as an ontogenetic analysis of those types (processes that give rise to self-systems); and lastly (3) value conflicts or axiological impediments feature centrally in the discussion that follows, regarding change processes in (self)-systems according to the body of literature being analyzed.

Summary and Integration

According to Tacq (2007), "analytic induction can hardly be called a scientific method or a research procedure. It is rather a recommendable brain activity" (p. 207). This author also referred to analytic induction as a form of theoretical sampling that could facilitate concept formation through the selection of deviating cases. I would tend to agree with Tacq (2007) that analytic induction is not sufficiently developed to count as a full methodology. However, there are some very useful notions within Znaneicki's theory that seem to offer points of integration between the symbolic-interactionist roots of grounded theory, and Maturana's ontological assumptions about living systems.

In grounded theory, "the researcher begins…by explicating his or her own preexisting knowledge and understandings of the phenomena of study, and continues by recording evolving understandings in light of reflections on the data, and increasingly abstract representations"

(Milliken & Schreiber, 2010, p. 691). This is why I began the introduction by reflecting on the origins of my preexisting knowledge and evolving understandings, and proposed a recursive narrative format.

The theoretical product of this analysis will be an attempt to explain variability in efforts to produce systemic change across different social science disciplines, but with a particular focus on counselling psychology. The variability in efforts will be explained according to what various disciplines orient their students towards, as well as some of the things each field may miss through their specific disciplinary focus. Furthermore, I will approximate Znaneicki's requirement of a universal theory by offering a set of aphorisms as a summary. Again, while these might read as universally applicable statements, I would prefer to view them as condensed interpretations of recurrent themes in the literature, stated in concise terms with the intention of making them easy for readers to interact with. I will present this theoretical product in Chapter VI, and will address the second research question raised in the introduction: that of how the relationship between self and culture is relevant to issues of systemic change. The implications for counselling psychology research and practice, will also be addressed in Chapter VI.

I will shift now into a discussion of attempted solutions within the discipline of psychology to the problem of systemic change. Again, Chapter IV is an exploration of what is happening at the interface between bottom-up and top-down sciences concerned with problems of human functioning. Having detailed bottom-up paradigmatic considerations in Chapter II, as well as current trends in attempted solutions in Chapter IV, Chapter V will turn to a focus on empirical trends in the social sciences that accord some primacy to the sociocultural context as a determining force in human functioning. Grounded theory methodology will be used to elucidate those trends and to develop further theoretical implications regarding systemic change.

Chapter IV

ECOLOGY OF THE PROBLEM

> Events [today] seem to involve more than just individual decisions and actions and to be determined more by socio-cultural 'systems,' be these prejudices, ideologies, pressure groups, social trends, growth and decay of civilizations, or what not. We know precisely and scientifically what the effects of pollution, waste of natural resources, the population explosion, the armaments race, etc., are going to be. We are told so every day by countless critics citing irrefutable arguments. But neither national leaders nor society as a whole seems to be able to do anything about it. (Bertalanffy, 1968, p. 8)

That old French proverb is stickier than a baguette glazed with molasses. Watzlawick and colleagues (1974/2011) would perhaps suggest that the reason any conscious human could make this same statement half a century later is that our collective attempts at systemic change have targeted first order processes more than second order processes.

Indeed, in order to assess the current understanding of second order processes in marriage and family therapy (MFT), Davey and colleagues (2011) conducted a modified Delphi study, which is a type of study that seeks consensus among experts. What these researchers found was remarkably little consensus regarding the definition second-order change or its presentations. If a field that is supposed to be specialized in catalyzing that kind of change cannot achieve consensus about what it is, it is not surprising that the broader society, with less theoretical support in navigating such issues, would also be struggling. Davey and colleagues insinuated that family therapists, and particularly their educators, have a trailblazing role to play regarding systemic change.

In this chapter, I will follow Watzlawick and colleagues' (1974/2011) recommendation to examine problems in terms of attempted solutions. Fortuitously, this suggestion meshes very well with grounded theory methodology, with its emphasis on searching for patterns in participants' attempts to resolve their main concern. For the sake of keeping things relevant to the practice of psychotherapy, it seems prudent at this point to first frame the context of main concern, systemic change, as it manifests in counselling theory, research, and practice. Thus, I will explore the problem and attempted solutions in tandem in this chapter. In the next chapter, following Znaneicki's method of negative case analysis, and will analyze the broader social science literature. The authors in that domain share a concern with systemic change, but they do not fit the pattern I have identified among various stakeholders in this chapter.

Participants' Main Concern: Change Processes in Psychotherapy

It is my belief that psychology is a confused discipline. I would locate the source of this confusion in the positioning of this discipline relative the overall ecology. In Chapter II, I highlighted some paradigmatic conflicts that counselling psychologists attempt to navigate. I will now contextualize those claims, beginning with what we agree upon.

Psychotherapy is a professional helping endeavor predicated on the idea that change is possible. This is arguably the most central and agreed-upon assumption of the discipline. The purpose of counselling is to facilitate positive change in the client's life, and counselling is typically presented to students of the profession as a collaborative process of facilitating the changes clients desire for themselves (Corey, 2009; Paré, 2013). I would suggest that that is where the agreement ends.

In my experience, textbooks used for graduate level training in counselling psychology seem vague on what the change process actually consists of, and tend to define it through a

combination of references to Prochaska's transtheoretical model (TTM), and the assumptions about change implicit in various theoretical models (see Corey, 2009). The common factors of effective psychotherapy are also frequently discussed in psychotherapy research and training, but the implications are somewhat vague regarding change. This confusion seems illustrative of a broader issue: that our understanding therapeutic change processes lags behind our understanding of treatment efficacy (Heatherington, Friedlander, & Greenberg, 2005). In other words, we know that therapy works, but we are less knowledgeable about how or why.

Corey (2009) brought this conceptual vagueness into the foreground in an introductory textbook on the theory and practice of counselling. He wrote, "somewhat paradoxically, change is facilitated by staying present and by not trying to change anything at all" (p. 427). This is a confusing statement in the context of a training model that is heavily focused on interventions, but it exemplifies the state of change process theory and research in counselling psychology, as I will attempt to illustrate. I will discuss some possible reasons for, and implications of this vagueness for the field of psychotherapy as a whole, with a particular focus on the poorly defined concept of second order change that is the alleged focal point of MFT.

Change Processes in Individual Therapy

Students of counselling psychology are often introduced to models of psychotherapy early in their education. These models contain assumptions about change processes, but the assumptions are rather diffuse. Nonetheless, students learn to use models to organize their thinking about client problems. Then, in discussions about the common factors of effective psychotherapy, they are also offered a solution to the problem of multiple theoretical realities – hundreds of which result apparently in equivalent outcomes (Nathan, Stuart, & Dolan, 2000).

Empirical findings on the common factors tend to translate into wisdom about how the counsellor should *be* in relation to his or her client. The common factors model is often used to talk around, rather than about, the change process. It can helpful to therapists in figuring out how to use models, particularly if they would like to use an integrative approach.

As for more direct assumptions about the process of change, the TTM is perhaps close to synonymous with 'change process' in psychotherapy research, training, and practice. Nonetheless, the model has numerous detractors. I will elaborate on the various assumptions about change embedded in psychotherapy models, the common factors model, and the TTM.

Models. There is a lack of consensus in psychotherapy theory, research, and practice about the basic mechanism(s) through which therapeutic change takes place. Each school conceptualizes psychological problems differently, and thus assumes different mechanisms of change. To illustrate how models inform change processes more clearly, Table 2 (below) presents a summary of change processes assumed by popular schools of individual therapy. This table is far from comprehensive, but is adapted from Corey (2009). Interestingly, Corey did not speak explicitly about change processes; rather, he presented novice trainees with the therapeutic goals of each model, plus some applications in the form of techniques that are specific to the model. I am using his work as an example because, when I began my Master's degree, this was a popular introductory text for trainee counsellors. It should be apparent from the table that change is conceptualized in several different ways in different models, but there are also significant areas of overlap.

Table 2
Change Processes in Individual Psychotherapy Models

School	Goals: Techniques	Assumption about Change
Psychoanalytic	To reconstruct personality by making the unconscious conscious: Free association, dream analysis.	*Change happens when clients learn to prevent unconscious processes from interfering with socially acceptable levels of functioning.*
Adlerian	To develop the client's sense of belonging: Interviewing, therapist interpretation, psychoeducation.	*Change happens when clients achieve greater clarity on their basic assumptions and goals.*
Existential	To assist clients in becoming aware of their possibilities for fully authentic living by identifying factors that block freedom: No techniques.	*Change happens when clients achieve greater clarity how on their basic assumptions obstruct movement toward self-actualization.*
Person-Centered	To assist clients in self-exploration and integration by identifying impediments to growth: Use of self by a congruent, accepting, and empathetic therapist.	*Change happens when a client forms a relationship with a congruent and empathic therapist who demonstrates unconditional positive regard.*
Gestalt	To assist clients in attaining greater awareness, and thus, choice: Experiments, dramatizations, role-play.	*Change happens when clients gain awareness of their moment-to-moment experiencing through the I/Thou relationship with a present therapist.*
Behavioural	To eliminate maladaptive behaviours by increasing opportunities for new learning: Goal-directed behaviour modification, relaxation training, systematic desensitization, skills training.	*Change happens through the shaping of reinforcement contingencies.*
Cognitive	To become aware of dysfunctional cognitions by identifying and challenging core beliefs: Cognitive restructuring through experiments, journaling, etc.	*Change happens when clients are able to identify, challenge, and replace maladaptive core beliefs.*
Postmodern	To collaborate with clients in recognizing the oppressive nature of problem saturated life stories and to help clients identify solutions and alternatives: Restorying, asking about exceptions to the problem.	*Change happens when clients make movement from a victim position in relation to their problems toward an agent position with regards to their futures.*

Those are some theories; on top of that, there is the question of how these various assumptions play out in research. To take one example that of a well-known model, CBT offers an illustration of how the diffuse assumptions about change processes can play out in research. As previously mentioned, psychological problems are theorized within this model to result from dysfunctional cognitions; as such, the *cognitive mediation hypothesis* proposes that changes in dysfunctional thinking should precede symptom improvement (A. T. Beck et al., 1979 p. 19). Polman, Bouman, van Geert, de Jong, and den Boer, (2011) tested this hypothesis by studying the process of change over the course of cognitive therapy for obsessive-compulsive disorder. The general finding was that change processes are more complex and dynamic than the cognitive model predicts because patterns of change seemed to differ with some participants improving gradually, and others showing sudden gains or sudden worsening. Similarly, Weinberger and Eig (1999) cited studies showing that much clinical change takes place before there is any opportunity for cognitive restructuring – before or within the first few sessions.

Common Factors. As is clear from the above, models of psychotherapy embed assumptions about change, and research about the various assumptions often produces counterintuitive results. Another common view of change processes comes from the common factors discourse of effective psychotherapy. Although the idea that there no difference in efficacy between psychotherapies has been around since Rosenzweig coined the 'dodo verdict' phrase in 1936, this finding was reaffirmed in meta-analyses around the turn of the century, most notably in Wampold and colleagues' (1997) work (Nathan et al., 2000).

The common factors are aspects of treatment that are not specific to any particular model of psychotherapy. Four common factors are theorized, along with estimates of how much variance in outcome they account for. These are: (a) client and extratherapeutic factors, (b)

relationship factors, (c) model and technique factors, and (d) placebo, hope, and expectancy factors, which are thought to account for 40%, 30%, 15%, and 15% of the variance in outcome, respectively (Asay & Lambert, 1999).

While these factors are conceptually useful, they are often reduced to a kind of Rogerian edict that suggests, "The best way for a therapist to foster change is to be congruent and to offer an empathic and collaborative relationship." This reduction may be due to the weight of factor (b). Sometimes an addendum is added that borrows the insights of Jerome Frank, and combines factors (c) and (d). This addendum might state, 'Try selling clients on your model and techniques because doing so fosters hope, which mobilizes powerful placebo effects.' The implication is that something about the overall context of therapy catalyzes change. How this happens, no one quite knows, but if we attend to the 'something,' change will inevitably occur.

TTM. A well-known theory of change in the individual psychotherapy literature is Prochaska's transtheoretical model, which represents an effort to be more specific about how change happens. Like the common factors model, the TTM is an integrative model. This model conceptualizes 5 stages of motivation or readiness for change: (a) the *precontemplation* stage, where clients have no desire for change; (b) the *contemplation* stage, where clients are thinking about therapeutic change, but are ambivalent; (c) the *preparation* stage, where clients are committed to change; (d) the *action* stage, where clients actively work on their problem; and (e) the *maintenance* stage, where clients focus on relapse prevention (Mander et al., 2014).

Mander and colleagues (2014) explained that the central assumption of this model is that therapeutic interventions should match the motivational stage of the client. These authors also discussed the TTM's 10 theorized processes of change. These are defined as covert or overt activities of the individual to alter emotion, thinking, behavior, or relationships related to specific

problems, and they form two main categories. Those fostering more awareness of the problem, like consciousness-raising, are categorized as experiential processes of change. Those fostering active work on the problem, like contingency management, are categorized as behavioral processes of change.

In spite of the popularity of this model, detractors, such as West (2005) have called for an abandonment of this model. A common indictment leveraged against the TTM is that the stages are arbitrary. For example, an individual is in the preparation stage of smoking cessation he or she plans to quit within the next 30 (but not 31) days, and if the he or she attempted to quit for at least 24 hours, successfully, within the last 6 months (West, 2005). Similarly, in a review of the empirical status of the model, Sutton (2007a) noted that while the TTM has been incredibly influential, and is in fact the dominant stage model in clinical health psychology,

> The model cannot be recommended in its present form. Fundamental problems with the definition and measurement of the stages need to be resolved. Although a cursory glance gives the impression of a large body of mainly positive findings, a closer examination reveals that there is remarkably little supportive evidence (pages not numbered).

Change Processes in Marriage and Family Therapy

The situation with respect to change process theory and research is more complicated in marriage and family therapy. The problem is amplified in this field because treating a system is a more complex and dynamic endeavor than treating an individual, with more variables and interaction effects. Moreover, our empirical understanding of second order change processes is comparatively scant (Davey et al., 2011). In these authors' words, "not only do [MFTs] treat different types of problems from psychologists; [they] also treat them differently, with an emphasis on second order change" (p. 100).

Again, in Davey and colleagues' (2011) modified Delphi study, these researchers found little consensus regarding the construct of second order change itself. What participants *did* seem to agree upon was how to teach second order change, which they thought should involve lots of movement between classroom and clinic. Participants also achieved some degree of consensus (4 out of 15 panelists) regarding who the foundational authors were on the topic. They cited Gregory Bateson, the MRI group, Paul Watzlawick, and Carl Whitaker as being the most influential authors on second order change.

The obvious problem here is that if there is little agreement about what a construct consists of, it is difficult to operationalize and measure it. In Davey and colleagues' (2011) words, "clinically, 'we all know second order change when we see it,' but the age of evidence based practice also requires that we be able to *demonstrate it to others in replicable and reliable ways*" (p. 102, emphasis in original). Perhaps the models from individual therapy that have proven somewhat useful in conceptualizing change processes, such as the common factors model, can also be helpful for MFT research and practice?

Common factors. Sprenkle and Blow (2004) asserted that MFT has largely ignored empirical findings about the common factors, and proposed some possible MFT-specific common factors. These included the importance of relational conceptualizations, interventions that target problematic relational patterns, and the need for a balanced working alliance with all members. Acknowledging Sprenkle and Blow's concerns, Chenail and colleagues (2012) conducted a metasynthesis of qualitative studies in which the researchers had attempted to discover client experiences in MFT. Their results supported "many of the assertions made by the common factors advocates regarding the critical elements of successful psychotherapy" (p. 256), as well as Sprenkle and Blow's MFT-specific factors. A unique finding of this study, stressed by

the authors, was that clients seem to value therapists who are skilled in supporting intra-family alliances. The results also supported two MFT-specific concepts: recommending that the entire family attend, and maintaining an awareness of the family's awareness of their relationships.

The TTM. Sprenkle and Blow (2004) asserted that they knew of no published MFT applications of Prochaska's model. Since research on the common factors is limited and research on the TTM models is virtually absent, and since the field lacks a coherent, agreed upon definition of the kind of change they are apparently in the business of affecting, I will briefly touch on some empirical issues that seem to be hampering progress. Following that, I will review how various models of family therapy conceptualize problems, since as with non-systemic models, systemically rooted theories also imply leverage points for affecting change.

Empirical considerations. Heatherington and colleagues (2005) noted a paucity of midrange theory in family therapy (and in postmodern therapies in particular) to link broad theories of change to specific, in-session mechanisms. Heatherington and colleagues suggested there has been a lack of emphasis in research on client compared with therapist behaviours (such as paradoxical directives, externalizing questions, and so forth) that contribute to change.

Heatherington and colleagues (2005) also identified methodological issues as impediments to a better understanding of change process, for example, changes in family members' affect, cognitions, and behaviour should be measured and tracked at the individual as well as the systemic level, but how should these data be handled statistically? Specifically, how can outcomes be represented when some members change while others do not?

One interesting attempt to attenuate the statistical complexities inherent in family therapy research that has emerged more recently is the social relations model (SRM) of family assessment (De Mol, Buysse, & Cook, 2010). The SRM takes a constructionist-statistical

perspective, and can be used to assess family members' sense of influence on their relationships. Del Mol and colleagues (2010) invited users of this device to consider assessment scores as specialized, local knowledges, helpful in constructing relational hypotheses through the identification of statistically significant effects. The SRM generates actor effects, partner effects, relationship effects, a family effect, reciprocity at the individual and dyadic levels, and intra-generational similarity. In clinical use, the SRM effects of the single family are compared to a normative sample to obtain Z scores. However, the SRM does not provide answers regarding the meaning of any statistical effect (De Mol et al., 2010), and I suspect its use is likely to be hampered by a general dislike of positivist methods by MFTs who very frequently seem to identify with some postmodern paradigm. Statistical and methodological issues aside, I will discuss briefly how change is understood within specific models of family therapy.

Models. In another lecture at the University of Calgary, Dr. Tomm discussed the conceptualization of problems and (by implication) change processes in family therapy (K. Tomm, personal communication, September 11, 2014). He listed the assumptions of various schools' of family therapy about psychological problems. He divided the list into first order cybernetic assumptions, and second order cybernetic assumptions.

Though I have not asked him about it, a possible implication of this distinction could be that, in Dr. Tomm's view, some schools of family therapy are more reflexive about their assumptions than others. The point is not to get caught up in minutia, but to illustrate the results of these different ways of looking and seeing that have emerged, in family therapy. See Table 3 for Dr. Tomm's list of first order assumptions, and Table 4 for his list of second-order assumptions. Here is Dr. Tomm's summary of the family therapy models that inspired his own development in this field:

Table 3
First Order Cybernetic Assumptions

School	Approach	Assumption
Minuchin	Structural	*The maladaptive structure of the family is the problem.*
Haley	Strategic	*The malaligned power hierarchy is the problem.*
MRI	Cybernetic feedback	*The attempted solution is the problem.*
Satir	Communications	*A lack of affectionate communication is the problem.*
Bowen	Trans-generational	*Lack of differentiation from family of origin is the problem.*
Bosormenyi-Nagy	Contextual	*Lack of balance in privileges and obligations is the problem.*
Greenberg/Johnson	Emotion-focused	*Insecure attachments and secondary emotions are the problem.*
Just Therapy	Caucusing	*Lack of justice is the problem.*

Table 4
Second Order Cybernetic Assumptions

School	Approach	Assumption
Milan – Selvini	Functional cybernetic	*The problem is a solution.*
Milan – Boscolo/Cecchin	Systemic	*Rigid interaction patterns are the problem.*
White – early	Evolutionary cybernetic	*The problem is a restraint.*
White – late	Narrative	*The problem (story) is the problem.*
Furman	Constructivist	*The explanation of the problem is the problem.*
de Shazer	Solution-focused	*The focus on the problem is the problem.*
Social constructionist	Collaborative language systems	*The objectionable use of language is the problem.*
Maturana assumption	Bringforthist	*The distinction of the problem is the problem.*

The Problem: An Emphasis on "What Works"

It should be apparent from the extensive list of models presented here that there are many different ways to conceptualize psychological problems, as well as the role of family systems in the development and maintenance of such problems. Correspondingly, there are also many different ways to conceptualize change processes. Perhaps not surprisingly, then, a central preoccupation of research in psychotherapy has been on 'what works in therapy,' typically framed by foregrounding the importance of the therapeutic relationship (using the assumption of common factors and the research method of meta-analysis), or by emphasizing the special ingredients in various techniques (using the assumptions of various therapeutic models, and the research method of randomized controlled trials).

However, this emphasis has invited an intensifying dialogue that seems dichotomized along the lines of paradigmatic assumptions held by the participants. The dichotomy seems to relate to assumptions regarding issues of objects/no objects, and intrapsychic/social. Perhaps the most concise way to summarize this dichotomy is by presenting the claims of the various participants in the debate as a hypothetical dialogue (see Table 5). The 'statements' in this dialogue will paraphrase the basic theses disseminated by the authors I am citing.

Please note that this dialogue will not focus on the debate regarding models of psychotherapy versus common factors, as this has already been covered. Rather, it is my assumption that the theoretical issues persist in part because of the surrounding context of service delivery. As such, the dialogue will focus on that context, and will be framed as an interdisciplinary debate.

Please note as well that the thesis I am developing here hinges on Maturana and Varela's (1987) definition of knowledge as effective action. The debate about 'what works' in

psychology seems as good a place as any to embed that distinction. This dialogue is most certainly not a comprehensive overview of the debate. I would ask the reader to consider it instead as a sample of interdisciplinary tensions, as experienced by one student.

Table 5
The Context of Treatment Delivery: An Ongoing Debate

Sub-Discipline	Argument
Clinical Child Psychology and Psychiatry:	Even in well-researched areas, the evidence is uncertain. In the second edition of the text, *What Works for Whom? A Critical Review of Treatments for Children and Adolescents,* contributors identified the following problems: (a) some child mental health interventions have hardly been studied, and (b) our knowledge about the effects of the treatments we do have is limited. Overall, the consensus was very modest, which means clinicians are operating on a trial-and-error basis. Future clinical trials should not just address *whether* a treatment worked, but *how* it worked (Kennedy, 2015).
Clinical Health and Social Psychology:	Part of the reason we do not know more about 'what works' is a tenure, funding, and publishing atmosphere contributes to an abundance of cross sectional studies with small sample sizes and weak analyses (Belli, Aceros, & Harré, 2015; Kennedy, 2015; O'Carroll, 2014). And, as a result of this preference for impact over insight, psychology has adopted a naïve stance in relation to its subject matter. "The step forward is simple: give up events and causes and turn instead to meanings and rules" (Belli et al., 2015, p. 22)
Counselling Psychology:	Those are academic concerns. In *applied* psychology, methods that emphasize causes and specific ingredients should be placed in their context. The dominance of methods that focus on these is related to the effects of managed health care (MHC) settings, which *demand* such methods. The ongoing insistence that psychotherapies can be researched in the same ways as drug therapies, in spite of compelling critiques, is an effect of this context (Deegear & Lawson, 2003; Wompold & Bhati, 2004).
Clinical Health Psychology:	Psychotherapies *can* be researched in the same way as drug therapies because behaviours *are* observable, just like chemical interactions. If our field has failed to produce evidence that our interventions leading to lasting changes, it is due to an excessive focus in research on intrapsychic phenomena like thoughts and emotions. Even studies that do measure behaviour use measures (such as self-report) that are lacking objectivity. In addition to being more objective, clinicians and researchers should be collaborating more with health economists to promote interventions with greater fiscal appeal (O'Carroll, 2014).
Clinical Health Psychology:	Yes. If we have any desire to participate in modern health care systems and to involve ourselves in interdisciplinary teams, we need to continue with the project of producing empirically supported treatments (Barry, 2005).

Critical Psychology:	ESTs tend to come in two forms: efficacy and effectiveness studies. The former are concerned with replicability and internal validity. They result in generalized statistical abstractions that hold for populations, not people. They tell you little about what to do with *this* client, in *this* moment; moreover, the experimental conditions used in efficacy studies do not mirror treatment as it actually happens. Effectiveness studies emphasize external validity and generalizability. We are in need of new methodologies that merge the priorities of efficacy and effectiveness studies (Deegear & Lawson, 2003; Nathan, Stuart, & Dolan, 2000).
Counselling Psychology:	Yes, regardless of how we classify the studies, we've evolved a focus on producing 'clinically significant' change, which generally involves shepherding symptomatic individuals back within two standard deviations of whatever the current DSM calls 'normal.' A question that has emerged is whether a 'statistically significant' shift in depressive symptoms – say, moving from a 5 to a 3 on a ten-point scale of some symptom index, three months post treatment constitutes any *meaningful* gain in quality of life (Nathan, Stuart, & Dolan, 2000).
Critical psychology:	It is precisely this kind of misguided focus that accounts for why psychotherapy is being divested of its humane essence. It has become the servant of the surrounding culture to a point where, "rather than immersing themselves in the work for which they underwent a long and demanding training, [psychotherapists] devote inordinate time to haggling with bureaucrats and writing vapid reports full of the insurance industry's favorite buzzwords" (McWilliams, 2005, p. 144).
Social Psychology:	Perhaps, but keep in mind the effects of demography. There is growing pressure on health systems is to curtail health services to contain escalating costs because people are living longer. This creates more time for chronic diseases to develop. Social cognitive approaches focus on the demand side: they promote preventive self-management of health behaviours (Bandura, 2007).
Critical & Systemic Psychology:	Most of our interventions today are remedial, not preventive. These are not very effective for risky health behaviours, and even when they are, they fail to address the constant flow of new cases. Almost always, the original source of the problem in society is left unchanged, and unknown, while new services are continually proposed for new problems. Each new problem leads to a demand for additional resources, but because the underlying flaw in the system is never corrected, it gives rise to continuous demands for new, specialized services (Prilleltensky & Prilleltensky, 2003; Watzlawick et al., 1974/2011).
Clinical Health Psychology:	The obvious solution is to have *both* brief remedial therapies with strong empirical support, *and* public health campaigns, focused on prevention (O'Carroll, 2014).
Critical Sociology:	Attempts to bring about either behavioural, or cultural shifts via policy are very likely to be ineffective at best, and to generate active resistance, at worst (d'Abbs, 2015).

Philosophy of Science:	This whole debate regarding methodological and policy issues misses the point. Psychotherapy is a *moral* enterprise, although the field has been slow to recognize this. The profession has failed to uncover an objective truth in the form of a universal model of psychotherapy, which leaves clinicians feeling disoriented in an era of empirically supported treatments. The profession seems to advocate is an integrationist response that "[sidesteps] moral questions by reducing them to the issue of 'professional ethics'… couched in a language of 'effectiveness'" (Downing, 2004, p. 136; Bryceland & Henderikus, 2005)
Counselling Psychology:	Perhaps we need to shift this whole debate from *what works best in therapy* to *how therapy works best*. This whole debate is a relic of the scientist-practitioner model that emerged at that Boulder Conference in 1949, which sought to develop training guidelines for clinical psychologists. The result has been an overemphasis on content over process in therapy. The solution is for researchers to tune their focus beyond randomized controlled trials toward the minutiae of interactions within sessions (Rhodes, 2011).
Counselling Psychology:	This step would not be enough. Indeed, the scientist-practitioner model is outdated, as the University of Tennessee has shown us. They implemented a scientist-practitioner-*advocate* model, complete with a social justice practicum. Not only did they receive the APA award for Innovative Practices in Graduate Education in 2011, their enrollment shot up 250% since the program's inception. The writing is on the wall: *Students in counselling pscyhology are being asked to do advocacy work on behalf any marginalized and disadvantaged clients with whom they work. Clearly, they need to learn techniques of advocacy, which means: graduate programs need to teach the techniques of systemic change* (Rupani, 2013).
Social Work and Counselling Psychology:	The various helping professions and their educators are facing a crisis of values. This *paradox of value neutrality*. Both within the social sciences and the wider culture, value neutrality is encouraged, ironically and paradoxically, as a way to promote the confused values of liberal individualism; namely, strong self-interest on the one hand, and respect for the rights of others on the other. Counsellors and trainees receive the mixed message: fight oppression wherever you find it, but refrain from imposing your views on others. This message underwrites the logic of the profession of counselling psychology, making it difficult for anyone to 'know' how to do systemic change (Harrist & Richardson, 2012).

Summary and Analysis

The disciplinary categories depicted above are not discrete, and this analysis does not represent consensus within any of these categories. Rather, as indicated previously, it is a sample of interdisciplinary tensions as I have experienced them throughout my education. To summarize my central thesis so far, it is my sense that psychology is contributing less than it

could to human and social development largely because of its position in the ecology of fields that attempt to intervene on human functioning. Psychology is positioned between fields that are fueled by bottom-up assumptions and top-down assumptions, respectively, and in the context of service delivery, it attempts to both compete with, and answer to, all of them.

For example, psychotherapy researchers have faced pressure over the years to both prove their methods are effective according to the 'criteria of validity' of a community of observers who believe randomized controlled trials are the gold standard research method. They might not bother, but in this era where many clients have their services covered by third party payers, those parties would like some rationale for why they should cover psychological services in addition to, or in the place of, pharmacotherapies (Bryceland & Henderikus, 2005).

Psychotherapists also attempt to respond to calls from the other direction to stop objectifying and pathologizing persons. Within this camp, *real* change is depicted as a social justice initiative that radiates inclusion, validity, acceptance and opportunity though every corner of human activity. In this view, psychologists have functioned for too long as 'architects of adjustment' who have helped individuals and families cope with an oppressive status quo (Sugarman, 2015). To persist in this project without doing the advocacy work necessary to change this status quo would be patently unethical.

The Core Category

In their efforts to respond to these tensions, various professionals within psychology have developed various specialized areas of practice. It has become an exceptionally broad field in terms of its scope of practice. While some clinicians do stake out a middle ground, it would seem that there is nonetheless a pattern in which some clinicians orient themselves to the call for

(objective) evidence-based practice, while other practitioners embody a stance of indignation toward that whole project rooted in a concern about its potential effects.

In accordance with the grounded theory methodology, I have attempted to illustrate in this chapter both the participants' main concern (change, including systemic change), and their attempted solutions. The dialogue was rather circular, and did not reach any discernible agreement, and as such, the core category I have identified in this study reflects that circularity. In grounded theory, the theoretical product is a core category that explains the participants' patterns of responses to their main concern.

A complementarity. I would suggest that the entire field is playing out a cybernetic complementarity. Before articulating this complementarity, however, it is worth acknowledging that most of my training so far has been within the *IPscope* model of interventive interviewing, where *IP* stands for interpersonal patterns, and *scope* refers to a kind of assessment tool that allows one to look more closely at something. This model was conceptualized by Dr. Tomm and his colleagues at the Calgary Family Therapy Centre (Tomm, St. George, Wulff, & Strong, 2014). The IPscope model draws heavily on cybernetic theory but in Dr. Tomm's particular version, he has placed emphasis on the notion of behaviour as an invitation (Tomm et al., 2014).

Consequently, my looking at the circular pattern in the hypothetical dialogue was coloured by this training. The question became, "what is the objectivist approach inviting from the camp that claims to avoid pathologizing, and vice versa?" Viewed this way, and however trite and redundant it may sound, what emerged for me was a circular complementarity in which prescriptive interventions (targeting symptoms) invite perturbing interventions (targeting meaning). Others have alluded to this as well (see Fourie, 2012; Shean, 2013). Arguably, this latter pattern of intervening shares some overlap with the notion of placebo.

The term *placebo* comes from the Latin, *placere*, which means 'to please.' This term seems to have evolved in response to the treatments of physician Anton Mesmer in the late 1700s. Wompold and Bhati (2004) explained the history of research designs using placebo, and located the origins of this approach in an experiment carried out by a King Louis XVI's Royal Commission. According to Wampold and Bhati, Mesmer had been claiming to cure patients through objects he had 'magnetized.' This *animal magnetism* was the 'special ingredient' Mesmer had posited to unblock the flow of magnetism in a sick patient's body.

King Louis XVI's commission acknowledged that Mesmer's treatment worked very well, but discovered that it did not work according to its hypothesized mechanism. Thus, Mesmer was discredited as a charlatan, and the practice of controlling for placebo effects began (Wompold & Bhati, 2004). While it seems clear that postmodern approaches are a response to modern ones, it is less clear whether they are also at some level inviting amplified attempts from modernist practitioners at targeting symptoms.

Arguably, the DSM-5 could be interpreted as an example of such an attempt. Dr. Allen Frances is the psychiatrist who chaired the task force that produced the DSM-IV, and he presented a seminar at the University of Calgary on September 21, 2015. Apparently, he had some major concerns about how the DSM-5 was developed, and his presentation was geared at airing those concerns. According to my notes from that seminar, he claimed that there was an initial effort with the DSM-5 to "put more biology into psychiatry" by searching for biomarkers that might underpin the various diagnostic categories. Apparently the team wanted biological means of assessment in addition to clinical means. Dr. Frances reported that the efforts to find such biomarkers failed, and reported a belief that the first biological tests in psychiatry will be for Alzheimer's, in roughly 5-20 years from now.

In the meantime, the DSM-5 evolved instead to cast a more inclusive net for diagnostic criteria, in the name of helping more people. Dr. Frances reported that he warned the committee that if they loosened the criteria, the result would be to open space for drug companies. He described a dialogue between himself and the committee, which I recorded in my notes. The committee said, "why shouldn't we put in binge eating disorder if it will help people?" to which Dr. Frances replied, "because drug companies will come up with a (useless) drug for it if it's there, and you'll be responsible." Their answer was, "that's not our problem, that's an education problem" (A. Frances, personal communication, September 21, 2015).

Dr. Frances continued, noting that the "placebo is the best medicine ever created," and that the placebo response rate for severe conditions is very low, while for mild conditions, it is very high. In his words, "the best customer for a drug company is someone who doesn't need the medicine. They have the best response rate and are most likely to become dependent. They are a huge market." Dr. Frances used the example of ADHD, which he described as "the fad epidemic diagnosis of this decade." He reported a belief that ADHD has become an excuse for performance enhancement such that parents will get their kids drugs to enhance performance in school, while they would never think to give their kids steroids to enhance athletic performance (A. Frances, personal communication, September 21, 2015).

What this suggests to me is that drug companies and psychotherapists – particularly the postmodern and systemic varieties – are in the same business. Regardless of what we call it, we are in the business of offering placebo interventions for human suffering. Drug companies might claim that they are targeting actual symptoms, but if Dr. Frances' statement reveals anything about the logic of drug companies, it could definitely be argued that the business model of these companies is based on creating dependencies rooted more in *users' beliefs about the effects of*

the drugs than in the actual effects of the drugs. What would be a better explanation for a patient's willingness to tolerate side effects?

Medicine may believe it begins where the placebo effect ends, as might clinical psychology, but regardless of what is or what is not, my claim is that there are patterned attempts to help humans either by targeting symptoms, or by targeting something meta to symptoms such as the meanings attributed to them, or the attempted solutions. I am grouping all meaning-based interventions in the category of placebo only because they do not target symptoms directly. Others, particularly advocates of the common-factors model, such as Weinberger and Eig (1999), have discussed the placebo-like effects of psychotherapies. Generally, though, authors within this tradition seem to describe placebo-like effects as resulting from increased hope or expectancies for change on the client's part. In my reading of this literature, authors do not claim that meaning-based interventions, generally speaking, are like placebo-type interventions.

At any rate, the complementarity I have discerned here is arguably nothing new; it is simply the category of action that emerged as relevant from an analysis of 'participants' attempts to resolve their main concern.' The more important question is: so what? In an effort to better understand that, the next chapter will focus on how the broader social sciences have conceptualized issues of systemic change. The literature I am drawing upon in the next section covers a broad range of topics, but it represents the result of theoretical sampling according to the grounded theory methodology.

While it is a broad sample, there are two commonalities in all of these books and articles sampled. First, they address the issue of belief systems in systemic change; second, without being explicit about it, they all seem to focus more on the axiological dimension of paradigms rather focusing primarily on the ontological or epistemological dimensions.

Chapter V

ANALYSIS OF THE SOCIAL SCIENCE LITERATURE

> Ethical and moral principles, with their potential impact on politics and economy, lie at the heart of the improvement of our social models [if] we want to create better ways to develop the future of our societies. Hence, it is absolutely necessary to deepen our understanding of highly complex phenomena such as the development of human values, and the construction of the self vis-à-vis the development of society. (Rengifo-Herrera & Branco, 2014, p. 306)

Overview

This chapter will begin with a brief overview that is intended to situate the relevance of the subject matter that will be the focus for the remainder of this project. I will begin by briefly distinguishing some different approaches – namely, psychological and sociocultural – to dealing with problems in human functioning, and will discuss patterns within the different approaches. From there, I will shift into a discussion of the three main categories that emerged from a grounded theory analysis of the current sociocultural literature as they relate to issues that can have an impact on systemic change.

The categories manifested to me as another cybernetic complementarity, and specifically, as one Keeney (1983) discussed (following Varela) for how to identify higher orders of ecosystemic process: Recall the 'it' / the process leading to 'it.' In this case, specifically, the complementarity looks like this: 'two types of self-systems' / 'processes giving rise to self-systems.'

As a point of departure, I will discuss the category of individual self-systems, as it will be useful to distinguish between an 'individual,' as the term is commonly understood in

psychology, and the 'self,' as the term is commonly understood in sociocultural sciences. Following that, I will discuss aggregate self-systems. These are commonly referred to as either 'society' or 'culture,' but this analysis, grounded in systemic thinking, reveals that there is more to the aggregate level of human functioning than those terms would suggest. Lastly, following Znaneicki's method of ontogenetic analysis, I will discuss the processes that condition the development of self-systems at either level. Each category is made up of several subcategories which I will highlight and connect with the category as a whole. Following this analysis section, I will summarize this analysis and present implications.

Review of Salient Issues

As stated at the outset, this research is about social development. It is fairly evident that even at the level of individual psychology, clinicians and researchers have been concerned with the issue of social development. Though the development of human values may not be a standard entry point for researchers in psychology, there are many who are, at minimum, concerned with what is often referred to as 'context,' and over the years, psychologists and therapists have been giving increased attention to cultural and systemic factors in conceptualizing client problems.

Well known among these efforts is the work of developmental psychologist, Urie Bronfenbrenner. Indeed, Bronfenbrenner and Evans (2000) called for an integration of various social sciences, with attention to the dynamic interplay of processes at multiple levels of analysis and in multiple contexts. Moreover, they suggested this is a necessary step if the psychological sciences have any intention of responding to the many challenging philosophical issues confronting humanity today. Holzman (2011) has echoed this sentiment in her question: "Have the world's people stopped developing – emotionally-socially-intellectually-culturally-morally –

and, if so, is there anything to do about it? Has psychology stopped discovering anything that might be useful to human beings in transforming how we live [together]" (p. 98)?

As might be apparent from the hypothetical dialogue in the previous chapter, critical psychologists are playing a significant role in carrying out the ethical mandate regarding critical self-evaluation of psychology's place in society. According to Marks (2008), what this group has called for is actionable understandings of the individual-society dialectic. However, as I alluded in the introduction, *actionable* understandings begin with understandings. A central theme in the literature that addresses the person-society interface is that values and beliefs feature centrally at this 'interface.' More specifically, for Rosa and González (2012), the pivotal question was this:

> How cultural values get embodied in human individuals. That is, how values get appropriated so they turn into something belonging to the inner structure of the human agent. There are many fields of knowledge involved in the issues to be discussed here: ethics, sociology, politics, and psychology are among them. (p. 3)

Consequently, I have sampled the literature in various fields for actionable understandings of this individual-society dialectic. Generally, I was looking at social sciences that focus more on the social than the individual level of analysis, as I have already covered the state of theory and research in that domain. What I found interesting about the sociocultural literature is the way it tends to depict individuals. It seems to me that this body of literature has picked up where Maturana and the MRI group left off. In both cases, there is reference to some kind of drift over time that conditioned the current state of affairs – be it in biological living systems, or in sociocultural systems.

Wilber (2011) suggested a way of conceptualizing the processes of biological and sociocultural drift. For Wilber, evolution is a process of transcendence and inclusion. For example, a molecule uses the functionality of atoms, but is more than that; a cell includes the functionality of molecules, but is more than that. Wilber labelled these different levels the *physiosphere* and the *biosphere*. He noted an additional order of structural organization, which he called the *noosphere*, relating to phenomena of mind. He claimed that "the noosphere begins with the capacity to form any mental images, and this capacity begins with certain mammals" (p. 93). Wilber's thesis was that the different spheres have different structural organizations.

Interestingly, the body of literature I am analyzing here tends to describe the self as a system with a certain kind of structure; additionally, it depicts this system's organization as being analogous to, but different from, that of biological systems. It could easily be argued that psychology is also interested in the structure of self-systems. Personality theories are, after all, attempts to explain patterns that structure individual psychology (Feist & Feist, 2009).

Top Down Versus Bottom Up Approaches

Oddly, personality theory does not seem to be well integrated with the ideas in the broader literature about this self-structure. While some personality researchers have attempted to understand the effects of cultural influences on individuals, the assumptions and methodologies are quite different in sciences that use bottom-up versus top-down approaches. I will touch briefly on some examples of, and reasons for, the differences.

Bottom-up approaches. Keel and Forney (2013), for example, studied psychosocial risk factors for disordered eating by reviewing findings from cross-cultural and prospective longitudinal studies. They found that the incidence of anorexia nervosa demonstrated a linear increase from 1935 to 1989 in adolescent and young adult females, corresponding to an

increased cultural idealization of thinness. These researchers suggested a causative link between exposure to thinness ideals and disordered eating because the emergence of clinically significant symptoms in non-Western cultures has been shown to follow exposure to Western thinness ideals. In Fiji, for example, thinness had traditionally been a sign of social isolation. However, following the widespread introduction of televisions with Western programming into Fijian households, the proportion of girls scoring above the suggested cutoff on an eating attitudes psychometric test more than doubled (Keel and Forney, 2013).

However, these authors explained these findings using a bottom-up explanatory pathway. Keel and Forney (2013) hypothesized that personality traits might represent an interface between culture and individual difference in susceptibility to cultural risk factors, as these traits influence how we perceive and interact with our environment. Negative emotionality and perfectionism were trait-like factors that emerged in Keel and Forney's analysis, so they wondered if individuals with higher levels of these traits are drawn to similar others, which then creates a microenvironment in which concerns about weight and shape become magnified.

Top-down approaches. The literature from sociology and cultural psychology, meanwhile, seems to deploy an entirely different dialect than personality theorists would. To illustrate my point here, note the following description of values (the closest thing to traits in this literature, perhaps) offered by Rengifo-Herrera and Branco (2014):

> [Values] operate as affective hyper-generalized fields that may help to promote a kind of cohesion among Self-positionings within a psychological domain known as semiosphere …which is found at both subjective and collective levels. (p. 307)

My guess is that it would be uncommon to find reference to hyper-generalized affective fields and semiopheres in articles and texts about personality theory. In the sociocultural

sciences, however, authors seem to commonly draw upon, and to merge, the ideas of philosopher-linguists such as Ludwig Wittgenstein, Jaques Derrida and Gilles Deleuze, as well as developmental psychologists such as Lev Vygotsky and Jean Piaget (see Belli et al., 2015; Bøe et al., 2013, 2014; Gergen, 2009; Holzman, 2011; Newman, 2003; Rengifo-Herrera & Branco, 2014). Phenomenologists such as Georg Hegel, Maurice Merleau-Ponty, Martin Heidegger, and Edmund Husserl can be influential in this domain as well.

To be frank, I have not immersed myself sufficiently in the work of those figures to understand their ideas and practices (for example, semiotics) in more than the most cursory way. I have limited myself to studying the MRI group as foundational theorists to my subject matter, and view a Ph.D as a better forum for exploring foundational authors in linguistics, philosophy, developmental science, and phenomenology in greater depth. As such, the only claim I can make here is that I have noticed these figures to be influential in the articles I have analyzed in this section.

They seem to be less influential in mainstream psychology, however. In personality and social psychology, my sense (based on courses I have taken and articles I have read in these areas) is that these fields tend to draw more heavily on theorists (such as Freud, Adler, Maslow, Skinner, and many more) rather than canonical philosophers.

As for sociological theorists in this literature, there is some emphasis on the theories of Karl Marx, and heavy emphasis on the ideas of Michael Foucault. Admittedly, I have not read Foucault's specific works that relate to the main ideas deployed in this literature (such as *governmentality* and *technologies of the self*) in part because they were not fully developed at the time of his death (Papdimos, Manos, & Murray, 2013), and they have also been elegantly summarized by some of the authors covered here. Moreover, I had delimited my reading of

foundational works to those of the MRI group and their affiliates. My preference has been to focus on articles in the sociocultural literature that provided some reflection, summary, or analyses of the work in the various subfields being covered here – articles that report on the state of things, rather than just reporting the results of a single study.

Patterns in the Data

In all, while there is some overlap, there are significant differences in how mainstream psychology and the sociocultural sciences conceptualize the patterns that condition and structure human psychology. In particular, it is common in the broader literature to refer to 'selves' and 'actors' rather than individuals, and to attribute different sources of patterning to the self-structure than what mainstream psychology would attribute to individuals.

For an overview of the main ideas and terms in this literature, please refer to Appendix I. Following the grounded theory methodology, I have fractured the data in this section by finding codes and categories that tended to emerge from the data, and have grouped these codes into broader categories. In the preceding chapter, I described what emerged as the core category; another task of grounded theorists is to search for subcategories in the data that explain variability in participants' attempts to resolve their main concern. While the 'participants' in Chapter IV were mostly counselling psychologists, I have broadened the pool of 'participants' here to include theorists and researchers adopting a top-down, or sociocultural point of departure.

Znaneicki (1934) might also call this 'negative case analysis' because the wisdom in this body of literature does not fit the prescribing/perturbing pattern identified within counselling psychology. In fact, this body of literature has little to say about systemic change per se, in terms of process, but it does contribute significantly to our understandings of patterns in human psychology and behaviour, including and especially at the aggregate level. As such, it carries

implications for how to produce change in systems, or as Maturana might say, "effective action in the domain of systemic change." The remainder of this chapter will aim to describe and explain the categories in this literature, as well as their relationships.

As Appendix I indicates, the social science literature seems to conceptualize selves as patterned systems. It also seems to conceptualize 'aggregate selves' as patterned systems. This aggregate level is often referred to variably as 'society' or 'culture' but those terms would not be adequate to sum up the structuring of that level. Finally, the literature makes reference to a process leading to, or conditioning, patterns in both levels.

In all, I would say there is another cybernetic complementarity here, and specifically, it manifests as the one Keeney discussed (following Varela) for how to identify higher orders of ecosystemic process: the 'it' / the process leading to 'it.' As mentioned previously, this complementarity appears as: 'types of self-systems' / 'processes giving rise to self-systems.' The left side of the complementarity actually encompasses two categories: self-systems at the individual level (commonly understood as individuals), and self-systems at the aggregate level (commonly understood as culture or society). I will next discuss each of these categories beginning with individual self-systems, followed by aggregate ones, and lastly I will discuss the third category, which is about the processes that give rise to self-systems.

Individual Self-Systems

This category includes elements that structure (rather than condition) self-systems. In Znaneicki's (1934) model of structure dependence, elements that condition systems precede them (in the sense of phylogeny), or emerge early in their development (as in ontogeny), and significantly affect what is possible for that system. This fits with Maturana and Varela's (1987) notion of structure determinism as well. Nervous systems are an example of an element that is

both conditioned by the species' history, and conditioning of what is possible for a living system. I will cover elements that condition self-systems in the process category.

Here, however, I will discuss the structure of individual and aggregate self-systems. What I have learned in the course of this analysis is that there is little, if anything, that properly belongs to individual selves. More accurately, many elements that can 'belong to' self-systems are actually social phenomena that get appropriated by the individual who acts and believes as though the element is part of the self. This is because, unlike a biological entity such as a cell, a 'self' has the ability to (a) notice what it is consuming, and (b) decide whether it likes what it is consuming. Ideas may follow some kind of gradient just like molecules do, but ideological gradients are less determining than chemical gradients because of the possibility of self-reflection (Schwaninger & Groesser, 2012; Wrenn, 2013).

At any rate, many of the elements that structure self-systems will have process-like qualities. However, I have categorized them as *structural* elements because they support the presentation of individuals or groups in the current historical moment. Selves are in flux, so it can be hard to pin them down and define them in any meaningful sense. However, as personality theorists have noted, there is a certain stability to self-systems. Rom Harré has tied these notions of flux and stability together by suggesting that "'a normal human biological individual' is not necessarily associated with a 'single or unitary social self' but with a 'fairly consistent set of inner and outer responses to his fellows and to the social situation'" (Belli et al., 2015).

Again, this category is about elements that play an important role in structuring selves as they are 'now.' I will discuss individual selves in a definitional sense, as well as some of the ontological foundations of such entities. Only four codes seemed to emerge within this surprisingly thin category. Those include: *meaning, control, becoming,* and *emotions*.

Meaning and Control: The Ontological Foundation of Selves

This discussion takes the social psychology literature as a point of departure. There are two main ideas in this literature that are relevant, and perhaps foundational to the rest of the material in this section, and they are: (1) the importance of meaning, (2) the importance of control.

The importance of meaning. Proulx and Inzlicht (2012) identified a particularly robust finding in social psychological research, which is that people are strongly affected by reminders of their eventual death. They said,

> Following reminders of this unavoidable, incomprehensible event, people will affirm elements of their cultural worldview to which they are committed – so reliably, in fact, that 'cultural worldview defense' following a mortality salience prime *is one of the most replicated experimental effects in the psychological literature*. (p. 326, emphasis added)

This finding is the basis for what is now called the meaning making model (MMM), which is a theoretical attempt to integrate the vast literature on mortality salience primes. These primes were originally accounted for in terror management theory (TMT), but evolved as researchers came to realize that numerous primes beyond mortality salience could provoke subconscious worldview defense behaviours (Heine, Proulx, & Vohs, 2006; Proulx & Inzlicht, 2012). Heine and colleagues (2006) pointed out that while TMT assumed the psychological primacy of a fear of death, it is likely not death per se – but the loss of meaning invoked by death – that matters.

The MMM presents a motivational ontology predicated on human existential needs. This model rests on the assumption that people are most fundamentally motivated by a need to maintain *meaning*, defined as expected relations. This definition of meaning comes from Western existentialists, most notably, Albert Camus. Meaning links people, places, ideas, and

objects in expected ways and allows humans to navigate their environments. Thus, from birth onwards, we innately apply mental representations of expected relations (often called schema in cognitive and developmental psychology) to incoming information, and "this associative impulse is an evolutionarily adaptive trait that occupies a primary position in humans' motivational ontology" (Heine et al., 2006, p. 92). Constructivists will not have a hard time with this idea, but social psychologists have built further on these basic, Piagetian assumptions.

While the specific representations that people construct vary across cultures, there are three salient realms of expected relations in which individuals strive to maintain coherence: relations within the outside world, relations within the self, and relations between the self and the outside world. Moreover, the MMM posits four salient needs within those three realms that motivate meaning-maintenance behaviour. These are needs for self-esteem, certainty, belongingness, and symbolic immortality. In the MMM, self-esteem is construed as an individual's *interpreted* success at relating to the outside world. This is relatively important in Western cultures, compared with Eastern cultures, where constructs like face are more significant. This is because in individualist cultures, meaning is derived from viewing oneself as competent and in control, since people are socialized to view themselves as primary sources of agency (Heine et al., 2006).

At a more profound level, the MMM represents an attempt to respond to the question: what happens when expected relations are violated? The model proposes that violations provoke aversive arousal, which motivates compensation efforts. To compensate for violations of meaning, frameworks may be recruited that share no common content. Rather, empirical evidence strongly suggests that any framework of associations that is intact (not suffering from a recent violation), compelling, and readily available can be recruited to compensate for the

violation. This substitutability is referred to as *fluid compensation* (Heine et al., 2006). In this model, motivations are attenuated when sated, but the same underlying drive can be satisfied by various alternatives that serve the same function, just as hunger can be satiated by bread or fish.

In this model, expectancy violations motivate meaning-maintenance behaviours, but the mechanism is quite subtle (Proulx & Inzlicht, 2012). It might look like this: I see a fatal accident on the highway, when I get home; I try harder than usual to create a nice atmosphere for dinner. That, essentially, *is the most replicated finding in psychology research* (Proulx & Inzlicht, 2012).

The importance of control. Not much needs to be said here, as compensation behaviours around meaning-maintenance are obviously attempts to maintain a sense of control. What is worth mentioning is that I was recently tasked with reviewing the literature on various theories of health behaviours for a health psychology course. Examples of popular theories in health psychology include the health belief model, and the theory of planned behaviour. However, both of those theories have been critiqued for not producing robust evidence, largely on methodological grounds (see Abraham and Sheeran, 2007; Sutton, 2007b). On the other hand, the theories that seemed to hold more empirical promise were studies about locus of control and self-efficacy (see Bandura, 2007; Carmody, 2007; Stecher, 2015). Apparently, meaning and a sense of control go hand-in-hand, and these notions are of significant existential importance to humans. These assertions are well supported in social psychology research.

Selves as a Process of Becoming

If selves have an ontology, or a way of being that is structured according to the existential considerations just reviewed, they also have a process that corresponds to that foundation. The process, in this case, is not an epistemology or 'way of knowing.' While selves do use cognition,

just as biological systems do, selves are also more than biological systems; they transcend and include it.

The difference between 'selves' and simpler organisms is language, and the (recursive) ability to reflect on processes of cognition. As Taylor (1989) worded it: "there is no way we could be inducted into personhood except by being initiated into a language" (p. 35). I used the example previously of a pilot who can both fly, and describe Bernoulli's principle, while a bird can only fly. With language comes the ability to make distinctions – to bring forth objects from an undifferentiated background, and in doing so, develop relations with the distinctions. The process of selves is not one of knowing, but one of becoming (Taylor, 1989). Hence the wisdom of phenomenology: we are both being and becoming, ontology and process. And, what humans become has some tangible connection with the distinctions they make using language.

Within this process of becoming, according to Rosa and González (2012), humans have a need to create a belief about their own agenic capabilities. Doing so allows them to achieve a sense of self-responsible autonomy. Similarly to how a chemical boundary imparts autonomy to a living system in Maturana and Varela's theory of autopoiesis, in Rosa and González' view, the self is a belief that imparts autonomy to a human agent. In their words, "it is no entity, but a tool for self-government, a set of abilities, of capabilities for action, of virtues with potential" (p. 20).

This basic idea is echoed throughout the literature, but there is more. The self is also conceived as a story. As Holzman (2011) put it: In consciousness studies, "the self is an illusion, best conceptualized as a narrative center of gravity that helps us keep track of what we are doing, have done and will do…The self provides us with the illusion that we are unified inside ourselves and in time (p. 101).

In personality and developmental psychology, my impression is that individuals are conceptualized as collections of patterned tendencies, conditioned by the interaction of genes with 'environmental' or 'contextual' factors. Psychology would be less inclined to see an individual as a technology, a tool of self-government, a story, or a belief. However, that is how the sociocultural sciences depict selves. Selfhood seems to play a kind of placeholder role in this literature.

Charles Taylor's (1989) book, *Sources of Self* was an attempt to articulate the history and origins of the modern identity. Taylor is a philosopher of social science and professor emeritus at McGill University. In Taylor's view, "selfhood and morality turn out to be inextricably intertwined" (p.3). Taylor essentially conceptualized the self as a kind of transponder that 'reads' moral data and generates an image that will help individuals to appear good in the eyes of themselves and others.

Interestingly, Taylor (1989) also noted that a preoccupation with meaning is part of what defines the structure of the modern self. He put it this way:

> The existential predicament in which one fears condemnation is quite different from the one in which one fears, above all, meaninglessness. The dominance of the latter perhaps defines our age. But…the former still exists for many, and the contrast may help us understand different moral stances in our society. (p. 18-19)

Moreover, Taylor noted that "the shift between these two existential predicaments seems to be matched by a recent change in the dominant patterns of psychopathology" (p. 19). He described a shift from hysterics, phobias and fixations (in Freud's day) to a time where the main complaints hinge around meaning loss, lack of purpose, low self-esteem. It was for this reason that Taylor claimed, in order to understand these different patterns and styles of pathology, we

will need a better grasp on the structures of self. It will be important to elucidate next what emotions are and are not within this body of literature because they appear to be very significant structuring elements of selves.

Emotions

Many authors in the sociocultural sciences have been highly critical of how academic psychologists study emotions. In the sociocultural literature, emotions are "historically and culturally occasioned, deployed discursively and/or affectively in particular contexts rather than simple 'internal events' amenable to measurement as variables in a natural science modeled on biology" (Langdridge, Barker, Reavey, and Stenner, 2012, n.p.). Belli and colleagues (2015) wrote that studies of emotion are studies of how "meanings and biology interact with our sense of moral right and wrong" (p. 20). Indeed, emotions are often conceptualized in this literature as a link between biology and culture. For example, Rengifo-Herrera and Branco (2014) stated, "emotions are biological tools culturally regulated by means of overvalued habits which co-construct values, so they have a double bio-cultural nature" (p. 313).

Maturana, too, was very emphatic about the importance of emotions in our living. Mascolo (2011) claimed that in Maturana's epistemology, human behaviour has an emotional substrate. While humans tend to place a high premium on rationality, rationality is actually used as a tool to either deny, or justify emotions. Maturana (2015) has described emotions as bodily dispositions for action, and has suggested that ways of emotioning are conditioned by both our phylogenetic and ontogenetic histories of development.

Summary

This has been a very cursory glance at the structuring of self-systems. There is more to say about this, but it will be helpful to discuss the other categories, first. For now, it should

suffice to say that conceptualizing the self as a belief, story, or technology is what has allowed the social sciences to depict selves in more fluid ways. Rather than being an amalgam of five intersecting personality dimensions that show some variability across situations but are basically stable, there is more openness to what humans can be in the sociocultural conception. Perhaps Harré has summarized the ideas here most clearly in his interview with Belli and Aceros (2015):

> Clearly the self in one sense is generated as a social object, that is as a nexus of social relations, by the use of pronouns and forms of address. But if we turn to a deeper concept of person…we realize people are the basic entities of the social/psychological world. But surely, as you say, they are embodied? Yes, but what are those bodies but tool-kits and also, most importantly…a house that has an address and is occupied by people going about their meaningful and rule-governed and normative interactions. We as people have several selves – our point of action in the world, our beliefs…and the way we are seen with respect to these matters, especially the moral aspects, by others. (p. 24)

Harré's idea of 'many selves,' and the notion of fluidity, arises from the fact that the patterns conditioning the content of the self-systems have a lot to do with history and geography. Particularly in an era of globalization, then, there is a lot of potential variability. As Rosa and González (2012) noted, modern societies are not communities in the traditional sense; they are "pluralistic aggregations bound by general norms and backed by the force of law" (p. 18, citing Hooft, 2006, p. 111). With the distinction between selves and individuals clarified somewhat, and with the issues of norms and morality now foregrounded, I will now discuss the next category that emerged from the data: aggregate self-systems.

Aggregate Self-Systems

Once again, I will discuss the structuring of self-systems, this time at the aggregate level. The codes that emerged within this category were: *culture, cultural syndromes, worldviews, discourses, standards, norms,* and *values.* Again, while many of these structuring elements are process like, that is because self-systems, like cells, are never the same moment-to-moment. However, the elements in this category are strongly implicated in who the aggregate self is at *this* moment. They are fuel for the current, trending zeitgeist. Since culture is commonly equated with the aggregate level of human functioning, I will begin there.

Culture

Hedlund de Witt (2012) has warned us that "in order to better understand the nature and structure of (more) sustainable behaviours and lifestyles, insight into worldviews and how they function and change in society appears to be of substantial relevance" (p. 74). Drawing upon Hedlund de Witt (2012), I mentioned a definition of worldviews in Chapter II as a constellation of beliefs acquired passively as an artefact of socialization, and contrasted these with paradigms, or philosophies of science, which are acquired more deliberately. A question that deserves some attention here is: what is the relationship between a 'worldview' and a 'culture?' My suggestion, based on the material covered in this section, is that worldviews are specific to individuals, whereas cultures are essentially worldviews that coalesce into aggregate norms.

While there are other animals with highly plastic nervous systems that appear to have evolved some exceptional capacities, perhaps even (self) consciousness, what differentiates humans is that, compared with any other species, we seem to have disproportionately more learned than instinctual knowledge, and we have developed culture. So what is culture? My preferred definition is that articulated by Triandis (1996):

> [Cultures] provide the standards for perceiving, believing, evaluating, communicating, and acting among those who share a language, a historic period, and a geographic location [as well as] unexamined assumptions and standard operating procedures that reflect 'what has worked' at one point in the history of a cultural group (p. 408).

Standards. I would identify 'standards' as a key word in that definition. Going back to the discussion of the meaning making model (MMM) in the previous section for a moment, recall that the model posits four salient needs that motivate meaning-maintenance behaviour: needs for self-esteem, certainty, belongingness, and symbolic immortality. Regarding the first three needs, Heine and colleauges (2006) have noted that "meaning frameworks derived through close relationships provide people with the sense that their opinions are shared and are thus more likely to be correct" (p. 96), which suggests normativity of experience, and thus "[provides] relevant standards by which people can assess their performance" (p. 97). Similarly, these same authors claimed that "people can experience symbolic immortality by perceiving themselves as *living up to the standards of a culture*, and consequently becoming associated with [its] enduring features" (p. 100, emphasis added). In this view, standards amount to a compass of sorts, which can be used to navigate some space of normativity and acceptability.

What strikes me about this normative space is that it is reminiscent of Maturana's notion of domains, which again, are a space brought forth through the act of drawing a distinction, and which require a community of observers who agree about (a) the distinction, and (b) what constitutes effective action in the domain specified by the distinction (Imoto, 2011; Maturana & Varela, 1987). I would suggest that observers specify domains of cultural performance by distinguishing roles.

If roles are the context for standards, this suggests a normative space between 'not good enough' and 'better than can reasonably be expected' in which we can find loosely agreed upon standards regarding role performance. In psychology, for example, standards of practice specify the domain of ethical behavior for psychologists, and are part of the culture of the profession. They seem to cover the space between codes of conduct (which describe minimum standards) and codes of ethics (which are aspirational in nature). Standards of practice are codified in both the entrance requirements (such as degree status) and professional guidelines (Truscott & Crook, 2004). These standards represent areas of agreement, but they can vary considerably by jurisdiction. For example, most Canadian provinces require a Ph. D to practice as a psychologist but some only require a Master's degree.

Other examples of normative space implied by standards are the *good enough parent* standard, used in parenting capacity assessments (Choate & Engstrom, 2014), or *best interest of the child* standard used in legal contexts (Budd, Clark, & Connell, 2011). Again, the notion of standards seems to hinge around ideas of 'good enough' / 'not good enough' in relation to role performance. In essence then, standards constitute a space of boundaried normativity regarding what is acceptable in a given place, at a given time, according to a given community; they also serve to institutionalize areas of consensus.

Compared with professional standards for role performance, cultural standards are much less explicit, but they are nonetheless ubiquitous. In their discussion of how modern emotional culture has evolved over the past century, for example, Stearns and Knapp (1993) stated, "cultural change, in the emotions area, usually has some link with real standards. The extraordinary use of marriage and courtship manuals…into the 1940s and 1950s, reflected the need young couples felt for guidance in a period of uncertainty" (p. 785). I will discuss the

implications of this normative space further, when the community of observers is everyone who belongs to a given culture, but first I will touch how standards get encoded in something ephemeral like culture at all.

Standard operating procedures. This was another key phrase that jumped out for me in Triandis' (1996) definition of culture, perhaps because my father was a pilot. Pilots are no strangers to standard operating procedures (SOPs); in fact, my father's den was lined with manuals on this very topic. Because I have a fear of flying, I used to peruse those manuals for evidence that pilots are actually competent to fly. My father would sometimes catch me doing this, and would seize upon the opportunity to wax philosophical about the content of those manuals: "Honey, those right there are what you need at 39 000 feet when it all hits the fan." He would usually add, "Canadian Airlines' SOPs are some of the best in the world! We adapted them from NASA!"

Airlines are apparently aware that if an engine quits, most pilots will experience an adrenaline rush that will interfere with their ability to process information. So, airlines have devised checklists, which they refer to as *standard operating procedures*. Airlines vary, however, in the detail they put into these checklists. Some are more robust than others with more contingencies built in. At any rate, what these SOPs amount to are explicit versions of the assumptions that guide pilots' practices under both routine and uncertain circumstances; importantly though, they are important navigational tools for dealing with periods of threat and uncertainty.

While SOPs may seem pretty concrete and straightforward, there is still variability in how they are carried out, depending on the culture of the pilots who are using them. My father has talked to me at length about something called *mutiny*, which occurs when a first officer

undermines the authority of the captain. First officers are trained to do this only when they are certain that the captain's judgment is poor enough to put lives at risk, otherwise, the only thing at risk is the first officer's career. However, it has been documented that in some cultures, first officers have knowingly ignored SOPs and allowed their captains to fly into mountains, for example, because they have considered it preferable to die than to undermine the captain's authority. My father reports that Korean Airlines have been a case study on mutiny in training programs for pilots in North America.

My point here is that even when the SOPs are explicit, there is variability in how they are enacted. I am also insinuating that cultures have their own SOPs, but the SOPs typically remain tacit rather than being encoded explicitly in something like a checklist. This means there is a high degree of variability in the enactments of cultural SOPs, but they are nonetheless operative at some visceral level. Others have referred to these tacit injunctions as *discourses* (St. George, Wulff, & Tomm, 2015), though my feeling is that SOPs are more akin to a checklist per se, in terms of its structure, whereas discourses are more akin to the content of the checklist.

Norms. I have mentioned that standards demarcate some normative space. The question, then, is *how* do SOPs or discourses structure that space? Initially, I thought it was a straightforward process of statistical coalescence. My assumption had been that there is a discernible relationship between 'reality-in-here' and what manifests in 'reality-out-there.' In my initial thesis proposal, I made the assumption that an individual's perception is to reality what one data entry is to a sample of the centrally tending reality of all possible realities. The statistical relationship I was proposing was not original; it was simply probability theory applied to subjective perception as a way of understanding the process of cultural coalescence.

I was drawing upon the *grand mean* concept in statistics. In probability theory, this mean of means is a statistical abstraction that equates theoretically with an actual population mean. For a given population, all combinations of samples-size-n will have means, which can be pooled into a mean of means that should equal the population mean (if the samples are large enough). My suggestion was that culture represents centrally tending perception, within the context of much idiosyncrasy and variability. As Znaneicki (1934) put it: "The agreed-upon definition is reified (that is, made into a 'thing' in its own right) and is eventually experienced as that objective reality 'out there' which apparently only a madman can fail to see" (p. 95).

My idea was that reality-in-here gets reified through daily and institutional practices. For example, individuals will have idiosyncratic perceptions of an issue, such as "how should we govern ourselves?" However, those perceptions should be distributed and exhibit central tendency, and should also become reified in practices in ways that coherently reflect the consensus. The reified practice of 'electing government' would be an example of institutionalized consensus. My idea was that a chosen reality is brought forth from a backdrop of 'all possible realities' via centrally tending consensus, and is reified.

Others have expressed similar opinions. For example, Watzlawick and colleagues (2011) claimed that "anything is real only to the extent that it conforms to a *definition* of reality…reality *is* what a sufficiently large number of people agree to *call* real" (p.94, italics in original). And similarly, "cultural ideas and practices are generated (largely randomly), socially transmitted, and retained…Those ideas and practices that become widespread within a group of people define the culture of the group" (Kashima, 2014, p. 81).

An institutionally reified practice of a culture (such as voting) might be analogous to a population mean (or theoretically, a grand mean), whereas daily practices might be analogous to

the individual sample means that make up the grand mean. Individual perceptions would then be akin to individual data points. At any rate, it appears that I was on track regarding the statistical nature of perceptual coalescence, but somewhat mistaken about the straightforwardness of the statistical relationship. Apparently, Cronen and colleagues (1979) critiqued the 'Aristotelian logic' underlying any assumption that "major premises are simple aggregates of particulars" (p. 24). Their claim within CMM theory was that there is a complex feedback process between various levels of meaning underwritten by complex rules relating to 'oughtness.' Belli and colleagues (2015) have echoed these ideas and have stressed the necessity of understanding how discourses are involved in human psychological phenomena and behaviour.

Discourses. St. George, Wulff, and Tomm (2015) have made significant contributions to our understandings of what societal discourses are and how they operate. They defined them as "de facto rules of thinking and conduct" (p. 16). St. George and Wulff (2014) also described them as "key ideas that societies hold as to what persons in that society *should* believe and how they *should* behave" (p. 188, emphasis added). Clearly, if our beliefs and behaviour are underwritten by some tacit injunctions related to loosely-but-collectively-agreed-upon 'oughts,' then we have stepped out of the purview of is/is not; the dichotomized purview of objects and subjects – which are the central paradigmatic preoccupations of applied social scientists – and we have entered the axiological dimension of paradigms.

St. George and Wulff (2014) took a step back from what are commonly referred to in narrative and other postmodern therapies as *grand narratives*, which are dominant, organizing discourses that exert influence over persons and groups and that have implications for participation in society. These clinician-researchers have positioned discourses as "smaller, daily, more local ideas that become influential and are expected within our immediate families

and communities" (p. 188). As examples, St. George and Wulff offered the ideas people carry about questions such as these: What counts as success? What should happen in what order? What is considered healthy? What does responsibility look like?

In cultures, discourses saturate the normative space, or loose areas of consensus, that set the standards for what it means to be a good this or that. In other words, discourses specify (or structure) the domain of non-professional role performances, and what counts as effective action in that domain. In the case of pilots, SOP manuals are essentially discourses about how to 'do piloting well.' In the case of various professions, the standards are fairly explicit, and if you perform poorly, you are subject to sanction and might have your license revoked. On the other hand, if you perform toward the aspirational end of the continuum, you might receive accolades, or perhaps an invitation to deliver a keynote address at some professional homecoming.

Having touched on the issue of variable enactment of discourses as tacit assumptions are 'played out' in normative daily and institutional practices, there remains a question about how to conceptualize this variability in the enactments. St. George, Wulff, and Tomm (2014) reported the results of a study in which they sought correspondence between the pathologizing patterns played out in families, and the societal discourses those families drew upon to justify their behaviours. Interestingly, however they did not find a straightforward correspondence. Here is how St. George, Wulff, and Tomm (2014) described their study:

> We looked for the connections between parent-child conflict and the messages society promotes as to how parents and children should behave together. In practice, we noticed parents and children relating to each other in ways that seemed to resemble efforts to try to follow the "way they should be" more than engaging in local or situation-specific ways that reflected their circumstances. (p. 15)

Sociocultural interpersonal patterns (SCIPs). These authors began by noting that parents seem to enact common responses to their children's problems such as violence, punishment, criticism, leniency, and extreme generosity, and went on to describe how parents often justified these behaviours "as what they 'should do' or 'must do' to achieve a desired effect" (p. 16). St. George, Wulff, and Tomm were looking for something that could account for all the similarity they were noticing in family situations. More specifically, they were looking for pervasive understandings in society "regarding how the world is (or should be), and ways families might orient to those understandings, shaping their daily interactions" (p. 16). It was these authors' belief that "societal standards could be beyond anyone's legitimate reach, but they may still be part of the society's canon of beliefs about how things should be and thus serve as a pervasive mandate and consequent influence [on families]" (p. 17).

Using situational analysis, they found several categories which they labeled as 'discourses.' These included *tradition*, *acceptability, responsibility, hierarchy*, *expertism*, and *individualism*, however, they were unable to find unambiguous connections between these discourses, and the patterns enacted in families. To explain this finding, St. George, Wulff, and Tomm (2014) concluded, "we realized that [families' pathologizing patterns of interaction] were written in behaviourally specific terms and the societal discourses were more abstract" (p. 26), and moreover, "societal discourses were neutral and could be taken up in negative or positive ways to prohibit or justify actions" (p. 27). Elsewhere, they have labeled this variability in how families 'take up' discourses as *sociocultural interpersonal patterns* (St. George & Wulff, 2014).

Other researchers in the social sciences would agree both that norms and discourses provide structure for role performances, and that these performances are enacted with great variably. Rúdólfsdóttir and Morgan (2009), for example, studied the relationship young, middle-

class women have with alcohol. They noted that "the socio-cultural context alcohol is placed in makes us 'read' differently into the alcohol consumption of men and women and this has implications for how we choose to 'do alcohol'" (p. 493). These authors explained their participants' relationship with alcohol this way: "although the young women advocated 'the controlled loss of control' and definitely did not want to step too far outside the strictures of accepted gender norms" (p. 503). They suggested this pattern of controlled loss of control was constrained by the fact that "young women have to be careful how they manage their own bodies, since in the heterosexual economy they are responsible for the desires they evoke in others and the consequences others' desires have for themselves" (p. 503).

All of this suggests to me that performances of selfhood are structured by the norms of the place and the era, and that these norms have some relationship to what is valued. So what does any of this have to do with systemic change? Well, therapists are contracted by clients to intervene on problematic functioning at the levels of both individual and aggregate self-systems. Even when dealing only with individuals, therapists will often hear about problems in their clients' relationships, and inevitably, issues of fairness emerge, issues of how things *ought* to be, and therapists must refer to some standards to navigate areas of uncertainty. The problems encountered in this murky terrain very likely affect our effectiveness at producing change. I will next briefly discuss complications that can arise at the aggregate level.

Cultural syndromes. While psychologists, as mentioned previously, have few qualms about intervening on an individual's 'dysfunctional' beliefs, "it is substantially less clear what dysfunctional means in the context of a group's worldviews than in reference to an individual's core beliefs" (Eidelson & Eidelson, 2003, p. 184). Along these lines, Triandis (1996) distinguished *cultural syndromes*, which he described as:

> A pattern of shared attitudes, beliefs, categorizations, self-definitions, norms, role definitions, and values that is organized around a theme that can be identified among those who speak a particular language, during a specific historic period, and in a definable geographic region. (p. 408)

Eidelson and Eidelson (2003) took this notion a step further and sought to examine the parallels between the core beliefs individuals hold about their personal worlds and the collective worldviews of groups. They selected five domains of belief by reviewing the literatures in psychology, political science, and sociology, among other disciplines. Their aim was to identify beliefs directly relevant to distress or conflict at both the individual and group level with the hope that these belief domains could help anyone interested in systemic change to better understand the connections between individual psychology and group processes.

Eidelson and Eidelson (2003) identified beliefs about *superiority*, *injustice*, *vulnerability*, *distrust*, and *helplessness* that seem to serve a structuring role in both individual psychology and group processes. They also offered examples of how these beliefs operate at each level. They did, however, note that collective worldviews may exhibit central tendency, but they do not define the mindsets of entire groups because there is so much within group variability. They wrote, "no reductionist argument is being made that group worldviews are merely personal beliefs writ large. We are claiming neither the primacy of group or individual, nor that group-level worldviews are always readily predicted from individual-level beliefs" (p. 188).

Sticking with this group-mindset theme, Perrin, Roos, and Gauchat (2014) delineated what they called a *performative cultural model* in their study of American conservatism. They argued that identification as a conservative ties together several related but distinct modes of thought. They defined *modes of thought* as "cognitive and emotional styles, skills, and habits

that provide individual social actors with solutions to various problems they encounter in everyday life" (p. 287).

Perrin and colleagues (2014) identified *libertarianism*, *anti-intellectualism*, *authoritarianism*, and *biblical literalism* as modes of thought subsumed within a conservative identity; moreover, they suggested that identification as a conservative provides people with privileged access to the problem-solving repertoires of the other domains. The repertoires, of course, are used as devices to navigate morally uncertain terrain. As a more encompassing mode of thought, they described conservatism as "a meditation on – and theoretical rendition of – the felt experience of having power, seeing it threatened, and trying to win it back" (p. 285). They mentioned the concept of *status anxiety*, which, they claimed, "connotes a reactionary political posture toward a loss of power and status among certain segments of American society, most commonly picturing white working-class men. This fear and anxiety engenders a longing for the 'good old days'" (Perrin, Roos, & Gauchat, 2014, p. 288).

Enough has been said to convey the idea that humans face moral, existential, and practical dilemmas that they attempt to navigate by using problem solving repertoires available to them, sometimes in the form of explicit checklists, and sometimes by drawing upon tacit normative assumptions in the air around them. Moreover, they use the checklists and assumptions to navigate their performance of roles with which they identify. The checklists may coalesce into broader belief systems, which may be shared by others who identify with the same roles. The question that emerges for me at this point relates to how we come to identify with various roles. It is the question outlined by Rengifo-Herrera and Branco (2014) at the beginning of this chapter relating to the development of human values and the structures of self. I will touch on the status of values research next.

Values

> The study of human values…has not received much attention...The study of language, memory, and cognition has always prevailed over the analysis of topics such as beliefs, values, and other aspects of the psychological domain that are loaded with affective significance. Considering the great relevance of this phenomena in terms of human life and development within contemporary societies, and the challenge of building a just and democratic world, cultural psychology urgently needs to address [this]. (Branco & Valsiner, 2012, p. vii)

Interestingly, the book that I drew this quote from (an eBook in Athabasca University's library) was something I came across about a year and a half ago, when theoretical sampling was directing me to search for articles about values. At that time, very little turned up in the literature on this topic, aside from a few attempts by social psychologists to measure values through a 'circumplex model' (with values arranged on a circular motivational continuum). Schwartz is credited with developing this model. While their research is heavily quantitative, what I did take away from Schwartz and his colleagues' (2012) research is the assumption that values guide actions and express needs.

Gollan and Witte (2014) took the work of Schwartz and colleagues (2012) a step further and tested empirically how the circumplex model of values (CMV) accounts for value conflict or congruity at the individual level, and, how this fit of model generalizes across cultures. The model assumes that value types located next to each other are compatible whereas more distal values represent incompatible goals. Gollan and Witte were looking at the patterning of values both within individuals and across nations. They used large representative samples from 17

European countries, and found that 70% of respondents had value profiles that fit the model, but those whose values did not fit the model tended to be younger.

Similarly, when national samples were treated as the unit of analysis, individuals from Scandanavian countries exhibited relatively good fit with the model whereas those from Southeastern European countries, which are relatively conflict-laden, did not. In keeping with the idea that local discourses can coalesce into broader belief systems, Gollan and Witte (2014) attributed the differences between nations to "differences in the cultural normativity of certain values" (p. 464), and concluded that values "can be seen as a characteristic of individuals, of groups, of countries, and even of cultural zones" (p. 465).

Apart from these studies, the only thing I could find about values about a year and a half ago was the eBook, mentioned previously. These contributors to this eBook claim have approached the study of values by privileging the affective dimension. I will discuss this dimension in greater detail in the next section, but the main idea for now is that beliefs can be differentiated from values based on the load of affectivity (Branco & Valsiner, 2012). This is because values become emotionally laden throughout development, while beliefs are easier to change as new information is provided. Values, thus, involve a 'strong hypothesis.'

This, in fact, was Taylor's (1989) central thesis. To define 'strong evaluations,' he wrote that "some forms of life are seen as fuller, purer, deeper, more admirable. [These] goods or ends stand independent of our own desires, inclinations or choices…they represent standards by which these choices are judged" (p. 20). As far as articulating these strong evaluations, however, Taylor's claim was that we experience them as moral intuitions or instincts, and are generally quite inarticulate about them.

The research that has been conducted by social psychologists so far on the topic of values has been critiqued along the same lines as much of the research in that field. The critique looks something like this: values have a complex and dynamic nature that cannot be investigated by means of questionnaires or rating scales. This is because "they are not entities or fixed categories of any sort, subject to clear-cut classification…[Rather], they consist of fluid and complex motivational tendencies" (Branco & Valsiner, 2012, p. viii).

In the sociocultural literature, values are depicted as motivational dispositions deeply rooted in individuals' affective domains, and constructed along relationships between the individual, her/his social partners throughout development (Branco & Valsiner, 2012; Rengifo-Herrera & Branco, 2014; Taylor, 1989). They guide everyday goal orientations and actions. More specifically, "values are an amalgam of affects, cognitions and motivations, related to practices and experiences that emerge along development…and are essential for self development along ontogeny" (Rengifo-Herrera & Branco, 2014, p. 307).

In what ways are values essential for the development (or structuring) of the self-system? Rengifo-Herrera and Branco (2014) claimed that values *mediate* the process of self-development. In keeping with the existential considerations that structure self-systems, values are affective process-like entities that help establish psychological regularities in order to reduce uncertainty. They are motivational tendencies in the sense of being relevant to the processes of meaning-making pertaining to life and self (Rengifo-Herrera & Branco, 2014).

It was perhaps Znaneicki's (1934) awareness of this structuring capacity of affectively-laden elements in social systems that led him to identify 'axiological impediments' as being foundational to understanding change processes in such systems; in fact, he viewed these impediments as causal factors for precipitating change. He wrote that such impediments are

> Always due to factors external to the system, though not necessarily 'external' to the personal life of the agents who participate in the system. It is the result of a change which the values of the system undergo when connected with some other values which do not belong to the system. (p. 300)

As for the nature of the change a social system would undergo in this case, Znaneicki (1934) described it as "a deflection of the original line of development, a change…manifested in an effort to reorganize the system, to make it different from what it was" (p. 300). Maslow's notion of actualization is implicit in Znaneicki's descriptions. Znaneicki concluded, for instance, that "never does an axiological impediment interfering with the achievement of a system result in mere 'doing nothing,' as often happens with a technical obstacle" (p. 301). What I am hearing, here is a variation on Watzlawick and colleagues' (1974/2011) distinction between first and second-order change. Znaneicki seems to be suggesting that first-order change involves technical impediments, whereas second-order change – in social systems anyway – requires some kind of value conflict as an essential ingredient. It is perhaps noteworthy that Znaneicki is considered a foundational theorist in sociology regarding the notion of social roles (Truzzi, 1971).

In all, the major point being made here is that values are to crucial tools used to *orient* individuals in moral space (Taylor, 1989). Cultural psychologists have been publishing an increasing number of articles on this topic in recent years, and are working to understand the historical and cultural basis of human values, as well as how they operate as in motivational systems and translate into cultural practices. According to what researchers in this area have learned so far, Branco and Valsiner (2012) indicated that "values belong to the highest level of semiotic regulatory hierarchy…They guide our conduct, yet are ephemeral when we try to locate

them" (p. xiii). Moreover, the "system dynamically changes, but some values may continue to prevail over others (or not), depending on their affective power to regulate the system" (p. xiv).

Summary

Given the considerations touched on so far, there is one last piece of Triandis' (1996) definition of culture worth highlighting. He mentioned "unexamined assumptions and standard operating procedures that reflect 'what has worked' *at one point in the history of a cultural group*" (p. 408, emphasis added). We have covered how unexamined assumptions and SOPs operate to structure self-systems. This latter clause, however, suggests that beliefs, values, and practices can outlive their original usefulness and become sources of dysfunction. With respect to selves, this notion of 'outlived usefulness' was summarized well by Holzman (2011):

> Just as the self has been conceptualized differently at different points in history, so too has its impact and utility been profoundly different. Social therapy's critique is of the contemporary individuated, autonomous self and how it operates in the individual and in society today. (p. 100)

If selves are a process of becoming, culture could be viewed as a trending 'way of being' played out at an aggregate level in a given location and historical moment. This way of being may be working well, or it may be a source of trouble, or ineffective action, in some important domain. What I understand from this literature is that there is a threshold in this self-society interface where something of deep affective significance is both structuring and mediating the normative 'way of being' in a culture. But what does this have to do with counselling psychology and systemic change?

Well, as mentioned, therapists have developed great facility in intervening on the 'dysfunctional beliefs' of individuals. However, as the researchers on aggregate self-systems

have noted, whole families and even cultures can *also* develop dysfunctional beliefs. Such beliefs are referred to as in this literature as *modes of thought* or *cultural syndromes*. Perhaps it goes without saying that therapists are increasingly called upon to intervene in this space. Moreover, this is a space that therapists and other social scientists have come to distinguish a domain related to issues of 'social justice.' It is an incredibly murky area for navigating problems of systemic change. I will offer hypotheses for why this is so in the summary for the current chapter. Before doing that, however, I would like to elucidate the final category that emerged within this body of literature: the category of processes leading to self-systems.

The Process Leading to Self-Systems

This category includes processes that lead to and condition the development of self-system, or that determine their structures in Znaneicki's (1934) sense. These notions are represented in the following codes which I will attempt to integrate into a kind of story regarding how they operate: *affect, collective cognition, economies of affect, ethical becoming, embodiment,* g*rounding, identity, metaphors, neoliberalism, ontogeny, oppression, performativity, potentials, resistance, social justice,* s*ocial pacts*, s*ubjectivity, value neutrality, and technologies of power and self.*

The Interface

Holzman (2011) has suggested that there is an artificial split "between inside and outside, between psychological and social, and between child and environment" (p. 102). She continued,

> Cognition, we came to believe, is a social and cultural achievement that occurs through a process of people constructing environments to act on the world. It is located not in an individual's head, but in the "person-environment interface." This is what an ecologically valid psychology of learning and development needed to study. (p. 102)

For those researchers who have taken this idea seriously, there seems to be a space at the person-environment interface that is loaded with potentials. I will start this section with a zoomed-in look at this 'interface,' and will zoom out from there to detail some of the broader forces that have conditioned self-systems at both individual and aggregate levels. As a point of departure, the interface appears to involve the following codes: *affect, potentials,* and *identity.*

Affect. In psychology, affect is often treated as a synonym for emotion. Sociologists, however, have increasingly recognized that emotions constitute macro-level social processes as they constitute individual psychology (Hynes, 2013). Hynes was attempting to document an 'affective turn' in sociology. She described this turn as a paradigm shift in sociology that was following a shift that had been taking place in cultural studies since the mid-1990s. As evidence of this turn, Hynes (2013) noted that Deleuzian conceptualizations of affect have increasingly appeared in diverse sociological journals, but had not yet become mainstream.

For Hynes (2013), affect is not a state, but a transition, specifically, in the capacity to affect or be affected. She claimed that "while affect has both micropolitical and macropolitical dimensions, it works across, or rather *between* the spheres of the 'micro' and 'macro,'" such that "affect's ontology is that of the *middle* or the *in-between*" (p. 562, emphases in original). In other words, affect is a potentiating force between the individual and the collective.

Affect as potential. If emotions are typically consciously felt or experienced, Hynes (2013) treated affect as something that both precedes and exceeds an individual's conscious perception. Affect potentiates transitions in emotional states. It cannot be reduced to a property of the self; instead, selves experience affect as a sense of potential that adds intensity to their choices. Thus, affect is a capacitating dimension of action. Hynes (2013) was drawing on Deleuze's ideas that bodies carry with them a potential or charge that is only vaguely felt. Of

course, if there is some force 'in the water' that gives potency to emotions and choices, it follows that emotional hooks and goal orientations will be structured according to what is *valued*. We have covered what value is understood to be within this literature, as well as how it structures selves. However, I mentioned early in this chapter that selves were serving a placeholder function of some kind. I will now discuss that function in greater detail.

Identity. According to Maturana and Varela (1987), identity is the embodiment of a living system's autonomy. But self-systems transcend and include autopoietic systems, so he question emerges: what is identity for a self-system, and why would I code this as a process-level phenomenon? I have coded identity within this category because the roles with which individuals identify are essentially part of the medium; they are perhaps analogous to the nutrients used by cells, in interaction with a chemical medium. In my reading of this literature, identification is a process that happens in relation to valued roles, and *identity* (as a seemingly static entity) can function as a kind of placeholder for self, in the here-and-now. Moreover, role identification is a tool used to navigate socially and existentially uncertain terrain. As Perrin and colleagues (2014) noted in their research about conservative identities, identification with a given status provides access to the problem-solving repertoires used within that status.

In accordance with the structural considerations regarding selves, as discussed in the previous section, identities hinge on moral valuations. As Rosa and Gonzalez (2012) put it (quoting Blasi, 2005, p. 92), humans achieve a sense of moral identity when:

> A person so identifies with his or her commitments, cherished values and ideals, that he or she constructs around them the sense of a central, essential self. This sort of appropriation determines what "really matters" to the person; it establishes such a hierarchy among the person's goals and provides one with a sense of depth that behaving

in ways that contradict and negate one's central values is no longer felt to be a choice.

So in this view, the self might be analogous to a director of sorts, whereas identities operate more like technologies that orient selves to the implicit standards in a given role performance: the SOPs for that performance. Taylor has insisted, humans "care if their images matches up to certain standards" (p. 33). And in his view, the self needs identity to achieve a sense of agency: "we cannot *do* without some orientation to the good" (p. 33).

Having touched on how affectively-loaded moral identities operate as placeholders at the interface of self and society, I will move into a discussion of other themes that emerged in the sociocultural literature regarding the processes that condition self-systems.

Embodiment and Performativity

As is likely apparent by now, a very prevalent idea in the sociocultural literature is that individuals within a culture perform selfhood in patterned ways (Belli et al., 2015; Gammon, 2012; Holzman, 2011; Perrin, Roos, & Gauchat, 2014; Sugarman, 2015), although these sciences do not appear to have imported cybernetic understandings of pattern, en masse anyway.

The implicit patterning most often has to do with roles, because it is quite common, almost ubiquitous, for sociologists and cultural psychologists to refer to persons as 'actors.' It is not surprising that they see what psychologists normally call 'behaviour' as some kind of performance. In fact, it seems that the performative aspect is taken for granted in sociocultural sciences. In psychology, this view of persons occurs as well, but most commonly within the phenomenological tradition. In psychology, the explanation that seems to surface as to why behaviour has a performative aspect to it is somewhat convoluted, but the gist seems to hinge on notions of time, space, embodiment, and of course, becoming.

Often drawing on Vygotsky's notion of zones of proximal development, authors writing

within the phenomenological tradition will at times point to the fact that we are able to be both who we are and who we are becoming at the same time: hence the performative aspect (Holzman, 2011; Newman 2003). In all, the act of becoming (that which you are not yet) involves moving through 'ethical time and space' in a body. The notion of ethics enters here because ideas of who we are and who we are becoming are structured around what we value, and values form the basis for ethics. Taylor (1989) pointed out that our moral reactions feel visceral, like instincts. He called our moral intuitions "an assent to, an affirmation of, a given ontology of the human" (p. 5) and one, moreover, that we view as a correct articulation of our gut reactions.

Ethical becoming. In the phenomenological view, then, our performative becoming as selves has something to do with our ability to move freely in preferred and valued directions within this ethical time and space. Mental health problems, not surprisingly are often conceptualized as a feeling of 'stuckness' in this ethical time/space (Bøe et al., 2014). Bøe and colleagues (2014) took the idea of psychological problems as embedded in context and sought to study the social and existential dynamics of change for adolescents facing mental health crises from a phenomenological perspective. These researchers noted that experiential studies of recovery from mental health problems have found that participants tend to describe their difficulties in relation to social arenas such as family, work, friends, school, and society. Their participants reported that their difficulties were often related to a feeling of not being recognized, valued, or of feeling unable to access social arenas and relations.

Metaphors. The previous year, Bøe and the same colleagues (2013) had also examined change as an ongoing ethical event. In this article, they discussed the important role of metaphors in any attempts to grasp the dynamics of change, and claimed that any investigation of the ethical aspects of change processes "must depend on and concern metaphors" (p. 20). Taylor

(1989) was similarly emphatic about the use of metaphors to depict our moral valuations. Taylor's claim was that we are, by and large, very inarticulate about these valuations. Currently, Bøe and colleagues argued, Western understandings of change hinge on the ability to identify causal relationships between static and demarcated entities in a picture of the world that represents reality. They critiqued this understanding as being unduly mechanical and not sufficiently dynamic. Change is ultimately, for these researchers, is an event of becoming-in-relation that is potentiated when individuals are oriented to possibilities previously unnoticed (Bøe et al., 2014).

In this view, the patterning of selves is related to existential considerations which are articulated approximately, via metaphors. Though I have not seen references to Maslow's hierarchy of needs in these articles, there are definitely themes of safety, belongingness, and actualization. Rather than using that language, however, authors within this tradition, as mentioned, tend to speak about existential considerations by referring to dominant metaphors in society (see Bøe et al., 2013; Gammon, 2012; Gergen, 2009; Holzman, 2011; McMullen, 1999). McMullen (1999), for example, discussed the history of depression as it evolved from a privileged status associated with creative men (called 'melancholy') to a feminine and devalued status. She studied the metaphors used by depressed women to talk about themselves, and noted similar themes identified by Bøe and colleauges (2013; 2014) of being devalued-in-relation.

But metaphors do not just appear out of anywhere. Perhaps more importantly for all of these authors, the way that selves become patterned in any historical moment has to do with the history that led up to that moment. In fact, Taylor's (1989) book was essentially an attempt to do for the social sciences what Maturana and Varela had done for the life sciences: it was an attempt to conceptualize the history of drifts and compensations that have resulted in some

(approximately) tangible reality, today. Taylor's (1989) interest was in articulating the moral ontology that underscores our 'intuitions.' There is one particular source of self-patterning that emerged in this literature as particularly relevant in the modern Western context, which I will discuss next. I will add that this notion seems to be gaining quite a lot of momentum in the literature, currently.

Neoliberalism

Neoliberalism is usually conceived as a political and economic response to postwar conditions, beginning early in the 1970s. It began as a set of fiscal policies in response to the economic turmoil of that era, where corporations' profits were being threatened by soaring inflation and the growing power of labour unions (Lemke, 2001). This author summarized a series of lectures in the late 1970s by Michael Foucault in which he documented the 'neoliberal turn.' In these lectures, Foucault apparently located the origins of the neoliberal project in the philosophy of German post-war economists who sought to break with the historical catastrophe that was the Third Reich by seeking social consensus around economic growth rather than historical mission, but even with this emphasis on economic growth, they maintained that markets required government regulation.

Lemke (2001) documented how, according to Foucault's lectures, the Chicago School of Political Economy imported the German value of economic growth, but, denied any distinction between economic and social spheres. Rather, this school conceptualized individuals as rational entrepreneurs whose decisions are guided by cost-benefit analysis. Political and economic institutions in North America have consumed The Chicago version (Lemke, 2001), and according to Sugarman (2015), these ideas have also infiltrated mainstream psychology theory and practice. Sugarman demonstrated some ways in which the language for conceptualizing

ourselves as enterprising individuals has been furnished by the coaching movement, rooted in positive psychology, as well as discourses about self-esteem and self-care. Similarly, Wrenn (2014) claimed that the discourse of neoliberalism places rhetorical emphasis on meritocracy and self-reliance. Given these considerations, neoliberalism has clearly transformed from its initial presentation as 'just a set of economic policies' (Sugarman, 2015).

Scholars such as Gammon (2012), Lemke (2001), Sugarman (2015), and Wrenn (2014), have maintained that neoliberal policy marks the overthrow of the welfare state that arose in the wake of the Great Depression and WWII. It also represents an ideological shift in the purpose of the state from one that protects citizens from the vagaries of the market, to one that protects the market itself.

While socioeconomic policies may seem, on the surface, to occupy a different domain than self-systems, within this literature, neoliberalism is conceptualized as a primary structuring factor in modern self-systems, analogous to how skeletal systems structure the type, 'vertebrates' in Znaneicki's (1934) theory of structure dependence. Recall that Znaneicki suggested ontogenic and phylogenic analyses of social systems as a way of understanding how certain elements became dependent on certain other elements. In light of this recommendation, I will discuss how neoliberalism evolved to structure selves in modern Western societies, according to the literature on this issue.

Ontogeny of neoliberalism. Gammon (2012) described the ontogeny of neoliberalism along social lines, which differed from the political and economic lines delineated by Foucault (in Lemke, 2001). Gammon detailed the historical forces from the Victorian era onwards that led to a process in society whereby one's social standing came to be distinguished by one's refinement in social conduct. Gammon linked this back to a shift in Europe when violence

became increasingly taboo (or more accurately, when the state began to take ownership of the legitimate use of violence). Consequently, city-states began to seek more diplomatic means of conflict resolution. Coincidingly, nobles began spending less time in the battlefield and more time in court, and in an effort to differentiate themselves from the Bourgeois class, aristocrats developed a high level of refinement in social conduct. According to Gammon, this trend ratcheted up the level of internal discipline required of individuals as fears of transgressing new norms around bodily and emotional displays potentiated feelings of shame and embarrassment.

Gammon (2012) additionally noted that these norms relaxed during the postwar era of the 1960s and 1970s, while at the same time, others emerged. Instead of bodily or emotional displays being taboo, displays of inferiority and superiority became increasingly taboo, particularly with regards to age, class, gender, and race. This was because the Fordist era was built on a need for class compromise. White men alone could neither meet productivity requirements, nor solely provide for their households in the context of soaring inflation.

This state of affairs opened space for various 'Others' to join the work force. These norms were, of course, manifested in practices, and blue jeans (associated with blue collar workers) became emblematic of equality between classes (Gammon, 2012). However, the sweeping emphasis on equality that emerged in the postwar era was answered with neoliberal rhetoric in the 1970s, which served to separate social grievances from politics by reframing them as market issues.

Freudian patterning. Indeed, one trend in Western societies that has gained accelerated recognition in the social science literature since I began this study is the trend of rendering individuals (and small collectives) responsible for the outcomes in their lives. Several authors have noted that this trend involves shifting responsibility for social risks (such as illness,

unemployment, poverty, addictions, and so forth) from the state onto individuals (d'Abbs, 2015; Gammon, 2012; Lemke, 2001; Sugarman, 2015). This strategy has been associated consistently with the politics of neoliberalism.

To account for this trend, Gammon (2012) traced the psychological origins of the modern self and reasoned convincingly that cultures (or aggregate selves) perform some normative way of being that is patterned according to the defensive maneuvers identified by Freud. He used various examples of displaced aggression and sublimation to illustrate his thesis. To cite but one example, "the privatization of state services led to the reprivatization of reproductive labour… [this and] the neoliberal discourse of personal responsibility created conditions for displacing aggression towards women" (p. 523). Gammon reasoned that *neoliberal subjectivity* amounted to a Freudian compensatory strategy that regulated the anxieties of white men who were dealing with repressed feelings of superiority.

Though they do not usually bring Freud into it, sociologists refer to displaced aggression very often, when they talk about moral scares, for example, or practices of othering in which someone (say, single mothers on welfare) or something (say, drugs) becomes a target onto which a large social aggregate projects blame for an array of social ills. The ubiquitous theme in all of it – whether or not it is named as such – is the regulating of anxieties, typically of existential origins. An important idea in this literature regarding how these defensive maneuvers are accomplished has to do with notions of subjectivity and governmentality.

Subjectivity. The notion of subjectivity can be a little unclear, but basically, subjectivity is depicted in this literature as a highly situated process involved in the structuring of selves. If selves are stories or narrative centres of gravity, subjectivities are perhaps analogous to pages in the story. I am drawing on the theory of logical types here to distinguish different orders of

hierarchy. This metaphor is not ideal, however, because subjectivities are more process-like than static entities like pages. As Langdridge and colleagues (2012) described it,

> Subjectivity is a constant state of becoming…[and] the self should be treated as continually varied, depending on the *setting* in which it emerges…Forms of subjectivity (thoughts, feelings, sensations, memories, perceptions and other first-person experiences) are inseparable from the circumstances and settings that provoke…them (n.p.).

Governmentality. Subjectivity relates to the notion of governmentality. This body of literature reports that Foucault discovered a connection between neoliberal styles of government and subjectivity, and that by *governmentality,* Foucault meant features and functions of sociopolitical institutions that shape and regulate the attitudes and conduct of individuals (Gammon, 2012; Lemke, 2001; Papdimos et al., 2013; Sugarman, 2015).

Foucault's semantic linking of governing ('gouverner') and modes of thought (mentalité) suggests that it is not possible to study technologies of power without an analysis of the political rationality underpinning them, for he saw governing as happening on a continuum ranging from self to other (Lemke, 2001). And, it is the governing that happens at the self-regulation end of the continuum where Foucault distinguished *technologies of self* (Lemke, 2001). As Gammon (2012) made clear, the use of such technologies is potentiated by an affective substrate: most notably, a desire to avoid feelings of shame and embarrassment. Sugarman (2015) wrote that:

> Key to implementing the technique of neoliberal governmentality is the invention of forms of discourse that can be used by individuals to examine their conduct, assess their attitudes and potentials, and shape their subjectivities through language that ascribes and emphasizes…self-responsible freedom and autonomy. (p. 7)

Lemke (2001) described a *political rationality* as a domain. In this sense, when political

powers distinguish problems in society, they specify the domain of possible responses. For example, noting recent increases in binge drinking patterns across several developed nations, d'Abbs (2015) prefaced his study by acknowledging his wish to better understand the relationship between self-regulation, domestic social regulation, and global economic deregulation of the alcohol industry. There is a very clear theme in articles about neoliberalism noting a circular or cybernetic pattern between economic deregulation and escalating pressures on individuals regarding self-regulation. The state is positioned somewhere at the interface with an arsenal of interventionist strategies (such as public health rhetoric or the ability to manipulate drinking costs and contexts). d'Abbs articulated the relationship as follows:

> Public health in this context is seen as a form of neoliberal governmentality…under which citizens are increasingly expected to monitor and regulate their exposure to an array of risks – relating to food, exercise, alcohol, and other perils – the dimensions of which are scientifically calculated and promulgated by experts. Failure to conform is seen as a failure of self-regulation. (p. 123)

This public health context, in which failure to conform is viewed as a failure of self-regulation, is but one example of how neoliberalism functions as a political rationality, or a technique of power. The authors in this literature have documented that, since the last decades of the previous century, neoliberalism has been functioning more at the *mentalité*, rather than the *gouverner* end of the regulation continuum. Sugarman (2015) said that "by institutionalizing [market] values, neoliberalism has had not only normative consequences, but also, ontological ones, extending to the very psychological constitution of persons" (p. 12). It is perhaps for this reason that Rosa and Gonzalez (2012) similarly noted that, "individual feelings, moral drives, legal obligations all seem to be increasingly interlinked with sociopolitical institutions and their

norms" (p. 9). And, very much in keeping with Maturana's subject dependent epistemology, Lemke (2001) wrote that "the modern soverign state and the modern autonomous individual co-determine each other's emergence" (p. 191).

To summarize the main ideas regarding the conditioning role of neoliberalism with respect to selfhood, Gammon theorized neoliberalism as *both*: an aggregate-level psychodynamic response to the tensions of the Fordist era, and, a technique of power. I would be tempted not to disagree with Gammon about neoliberal subjectivity regulating the anxieties of white men given that this notion is being dramatized at its extreme logical limit at this very moment. If Donald Trump is not a caricature of neoliberal selfhood, then I am at a loss for how to describe him. In sum, *neoliberal self subjectivity* is a very popular catchphrase, originating within the critical sociology literature, and it is presented largely as a compensatory strategy for organizing selfhood within an anxiety provoking cultural environ; a technology of the self that is culturally normative, historically situated, and deeply conditioning of selfhood in this modern era (Gammon, 2012; Nadel & Negra, 2014; Wrenn, 2014).

Economies of Affect

As mentioned, Gammon (2012) extrapolated the normative consequences of neoliberal subjectivity to the aggregate level. Apart from distinguishing Freudian defense mechanisms operating at that level, he also claimed that as neoliberalism expanded within the global political economy, a distinct affective configuration of the self arose in Western cultures and coalesced into an *affective economy*. Gammon did not define this term, but implied it to denote 'a historically situated way structuring of social relations so as to mediate anxiety and aggression by normatively endorsed means.'

Economies, of course, consist of markets. They are basically the sum of what is available to 'buy into.' Thus, an economy of affects must have something to do with the emotional configurations available to selves in a given place and era. So, a commonality in such economies would be that they regulate and anxiety and aggression, however, it would be reasonable to hypothesize that the patterns involved in this regulating function vary by culture. Indeed, Bateson (1972) has documented meticulously that the need to dissipate excess energy is a problem that must be attenuated in all societies that have attained subsistence. Similarly, Gammon (2012) reasoned that affective economies function like potlatch ceremonies, or mass consumerism: they are social technologies involved in dissipating excess. His notion of affective economies adds another layer to the potentiating role of affect discussed earlier.

Holzman (2011) alluded to the notion of affective economies, and in light of such considerations, described the rhetorical work therapists must engage with in the modern West: "[Clients] speak the commodified language of emotionality. They present their emotional problems in a way that manifests their commitment to their individuated identity: "I have this problem" (p. 100). She continued by asserting that the poverty of this 'sense of having' is what therapists need to work with. This commodified understanding,

> Creates ways of relating to others that are contractual and competitive. It creates an acquisitive form of life and an impoverished repertoire of emotional responses… Therapists must strip away the commodification that overdetermines not only how we see and feel, but also how we relate, and what we believe to be possible. (p. 101)

A vivid illustration of this notion of contractual emotionality comes from Korteweg's (2001) study of the meaning people ascribe to marriage in the Netherlands. She was interested in learning why marriage persists in a country that actually debated abolishing the institution in

1996. Interestingly 11 out of her 15 participants said they thought marriage was meaningless from an emotional standpoint, yet, 10 of those 11 expected to marry. The reason her participants offered for this contradiction was that marriage was a useful contract for dealing with property and custody in the event of dissolution. Korteweg looked beyond this rationale and hypothesized that when institutions become associated with deeply felt desires, they are not easily undermined by social changes that minimize them; thus, marriage offers emotional hooks that survive even when social pressure to marry is limited and legal substitutes exist. These examples illustrate how culture can interact with an emotional substrate.

Gammon's notion of affective economies that are regulated by Freudian mechanisms finds evidence elsewhere, too. Stearns and Knapp (1993), for example, analyzed the content of *Esquire* magazine over the course of the 20th century in an attempt to trace the origins of male emotional culture. They reported that historians have cast modern men as emotionally absent, whereas a study of Victorian-era love letters revealed middle-class men to be highly vulnerable, prone to pouring out their souls, and preoccupied with love from the 1830s through the end of that century. These authors assumed that because social mores demanded a calm and calculating public demeanour from men, men sought expressive emotional experiences in private.

According to Stearns and Knapp (1993), Victorian men's emphasis on love was overwritten beginning around 1920. Around the same time that women began joining men in schools and offices, Men's magazines began depicting male emotional withdrawal. As patterns of courtship shifted toward increasing engagement in sexual activity, Stearns and Knapp noted, "whatever the role of sexual sublimation in Victorian commitment to romance, the need for it declined," and by the 1950s, "manifold love was replaced by centerfold cutie" (p. 777).

Esquire began to disseminate misogynist attitudes to its massive readership and launched "a scathing though ideologically diffuse attack on modern women" (Stearns & Knapp, 1993, p. 778), which crested around 1936. The theme of unrestrained emotionality occurred most frequently. Stearns and Knapp (1993) believed this renunciation of the Victorian sanctification of women to be rooted in men's deep anxieties about modern trends, since the revision of Victorian love standards occurred at precisely the time that gender equality was being asserted, at least in principle. Into the 1960s, any talk of women essentially vanished from *Esquire*, except as sex objects, and was replaced with the themes of travel, politics, bravery in war, cars, vacations, yachting, jazz, fishing, race relations, and social climbing. I find these examples from the literature to be illustrative of Gammon's notion of affective economies.

Existential patterning. Earlier in this section, in discussing notions of embodiment and performativity as they relate to self-structures, I noted that in the literature that emphasizes notions of becoming-in-relation, the patterning of selves tends to be depicted in relation to existential considerations (as opposed to Freudian ones). Wrenn (2014) wrote an article that offered a potential link in these conceptualizations of self-patterning, particularly at the aggregate level. She began her article, entitled, *The Social Ontology of Fear and Neoliberalism*, by noting that fear can neither be thought of as purely an instinct, nor a socially constructed phenomenon; rather, fear must be studied as a process that has a developmental history and "should be understood as both structurally determined and socially transformative" (p. 337) – or as both determined and determining in Znaneicki's parlance.

Wrenn's (2014) article offers, perhaps, a nice summary of everything that has been covered so far. She began by noting how fear evolved from a simple fight-or-flight response to a more "generalized state of anxiety that reproduces the social structure and teaches the individual

the importance of adherence to social norms" (p. 338). This author reasoned that the anxieties individuals share become part of the social structure. When the object of an anxiety-inducing event cannot be easily neutralized, redress from the resultant state of generalized anxiety falls to institutions, which adapt and evolve as part of the coping process.

Moreover, "at the core of modern fear lie two essential and related causes: ontological insecurity and existential anxiety" (p. 340). The former refers to the individual's need to continually reproduce (materially and socially) her standard of living, whereas the latter has to do with her ability to cope with the finite nature of existence. Those who are more ontologically secure, Wrenn (2014) reasoned, are better equipped to push existential anxiety into the background. And, the greater an individual's existential anxiety, the greater his or her allegiance to ideologically-driven identity groups. Wrenn believed that both sources of anxiety contribute to the appeal of conservative leaders. She suggested that the perpetual state of crisis avoidance nurtures insecurity and offered a circular analysis of the result:

> Neoliberalism heightens the feeling of isolation such that it sharpens existential anxiety. A vicious cycle presents itself: those who are more alienated within the system of neoliberalism likewise experience diminished ontological security; those individuals who are less ontologically secure are less equipped to cope with existential anxiety, and less able to push that anxiety into latency. Therefore, those individuals, twice alienated – once through the neoliberal project, and again through the experience of existential anxiety – must find more dramatic and all-encompassing means of connection with others in order to push against that alienation. (p. 347-348)

Aggregate-level anxiety and identity groups. Indeed, these claims have been echoed elsewhere. In their study of how individual beliefs interact with collective worldviews, Eidelson

and Eidelson (2003) maintained that a significant factor in the mobilization of individual members on behalf of a group will be the strength of the individual's identification with the group. Like Wrenn (2014), they also believed that pressures toward conformity can be intense during periods of heightened threat. Similarly, in the words of Rosa and Gonzalez (2012): "Cultural identities…in terms of religion, sects, gender, gangs, and the like – come to the forefront in public life, particularly among those who are left in the margins of society, and have no way of defining themselves otherwise (p. 11).

Having established that neoliberalism has morphed into something that conditions modern psychology at both individual and group levels because it is part of the value-determining emotional substrate of the modern West, the question arises: what are the mechanisms by which humans manage to achieve *any* degree of consensus in complex domains made up largely of unwritten and unspoken rules? There seem to be two compelling explanations available in the literature: one direct and one indirect.

Animal consensus studies. Once again, biologists from Ivy League universities have found meaningful directions of inquiry in relation to problems of human consensus in complex domains, but not by looking at humans, of course. Specifically, I am referring to the work of Iain Couzin and his colleagues at Princeton. Couzin is a prolific researcher on the topic of consensus and decision-making in social animals. His work is not easy to understand because he and his colleauges tend to use very sophisticated mathematical models to infer decision-making rules and to predict behaviour in groups of, usually, insects, fish, and birds. In discussing the state of research on these animals, Couzin (2008) reported, "only now are we beginning to decipher the relationship between individuals and group-level properties. This interdisciplinary

effort is beginning to reveal the underlying principles of collective decision-making in animal groups" (p. 36).

Couzin and his colleagues have asked such questions as how a whole school of fish can 'know' to turn away from a predator that they do not all see – perhaps only a few members of the population are 'informed' while the rest are 'naïve.' A notion that seems to appear frequently in their research is that most social species use the position of other animals in their immediate vicinity to make decisions about movement. For example, he and his colleagues noted,

> Effective consensus thus emerges from local interactions among individuals. Although individuals cannot explicitly 'tally votes,' they nevertheless exhibit the capacity to select, collectively, the direction preferred by the majority when conflicting preferences exist, even in the presence of a 'strongly opinionated' minority (Kao, Miller, Torney, Hartnett, & Couzin, 2014, p. 2).

What I find interesting about this is their use of the term "effective consensus." It is reminiscent of Maturana's idea that cognition is effective action, but they are applying it to the level of social aggregates rather than autopoietic entities. Even more interesting, they have found different phenomena in different species of animals. For instance, Couzin and his colleagues have discovered that, in herding species that follow migratory pathways, very few of the animals know the route because it is too costly for all the members of the species to invest in acquiring the necessary capacities, such as being able to 'read' the Earth's magnetic field. Instead, only a small number of individuals invest in this, "and are then exploited by other individuals in the population" (Shaw & Couzin, 2013, p. 122).

There are obvious parallels between Couzin's research and the issues involved in systemic change in humans. In his (2008) article entitled, *Collective Cognition in Animal*

Groups, Couzin offered the following questions and suggestions for future research: (1) To what extent can effective collective decision-making result from competitive interactions among individuals?; (2) How well do abstract mathematical models of collective behavior capture the dynamics of real biological systems?; (3) How does individual cognition relate to group cognition?; (4) Does enhancing collective cognition relax selection pressure on individuals' general cognitive ability?; (5) How do individuals within coordinated animal groups know what rules to adopt, and when?; (6) The feedback processes that tune collective decision-making could be implemented explicitly in individual rules and/or in dynamical collective properties that emerge from interactions. The relationship between these processes needs further study (p. 42).

It would be a challenge to import insights from research in this domain in its current state, but it seems like Couzin and his colleagues have increasingly been applying what they have learned from animal studies to studies on collective cognition in humans. It would be worthwhile for social scientists to keep an eye on this work. Moreover, the methodologies used in Couzin's studies seem to carry some implicit likelihood that collective human behaviour will be studied, increasingly, by use of complex, dynamic mathematical modeling. As for the state of research on humans, as it relates to collective cognition, or the ability to achieve the necessary consensus for complex domains of ecologically-calibrated action, there seems to be very little.

Grounding. Kashima (2014), however, has offered the mechanism of *grounding* as a possible entry point to such work. Grounding is a term that has emerged very recently, in studies about cultural dynamics. According to Kashima (2014), social psychological models are underdeveloped regarding the micro-level processes of cultural transmission. He positioned his article as a status report on current attempts to develop a theory of cultural dynamics, which he

claimed has begun to be investigated only recently. He cited mostly his own studies, carried out with colleagues, as research in this area appears thin.

Kashima (2014) described *grounding* as "the activity that people engage in to create and transmit cultural meaning" (p. 82). In Kashima's model, everyday interactions are the locus of cultural transmission, and meaning is grounded to the extent that it is mutually understood and accepted sufficiently for the present purpose by the participants of a particular joint activity, which could be any activity that people do together. Grounded (sufficiently agreed-upon) meanings are added to the participants' 'common ground.'

Within this model, if locally grounded information is disseminated and generalized through social networks, repeated and iterative activations of the grounding process maintain the social reality of the collective that we take for granted: Kashima (2014) called this process *cultural diffusion*. Interestingly, he drew on a number of studies in this area to conclude that the perceived sharedness and endorsement of ideas and practices plays a critical role in cultural dynamics, in fact, it is a precondition for cultural maintenance.

Kashima (2014) cited numerous studies indicating that people tend to behave in ways that are congruent with their perceptions of the norms of the dominant culture, and that uncertainty about the sharedness of culture appears to be critical for cultural transformation. The reason for this, according to Kashima, is that joint activities "have two broad goals, task relevant and social relational goals" (p. 88).

He has found that in routine activities where social engagement is of a primary concern, information consistent with people's widely shared cultural ideas and practices tends to be reproduced more. This is likely because information consistent with the prevailing culture is perceived to help individuals form new relationships and maintain the existing ones (Kashima,

2014). He as noted a dilemma, called the *informativeness-connectivity dilemma*, which arises when presenting 'common ground inconsistent' information would be beneficial in some domain of action, but would undermine the presenter's ability to connect with others. Because of this, the diffusion of cultural information depends on the relative importance of task versus relational goals.

One implication is the ideas presented in Kashima's work is that paradigm shifts require uncertainty as a key ingredient, and/or the prioritization of task goals over relational goals. Another important implication in Kashima's (2014) work is that grounding has normative consequences. In his words, grounding:

> Establishes rights and obligations among the participants to act in accordance with the grounded information. First, each participant is seen to have rights to expect others not to contradict the grounded information. The other side of the same coin is that each participant also has obligations to honour the other participants' expectations. (p. 86)

In reading this, I tend to wonder about how it came to be that norms would establish implicit rights and obligations between humans. Have humans always related to each other on the basis of implicitly understood rights and obligations? This is perhaps a good place to transition into a brief discussion about the historical origins and conditioning role of rights and social pacts in humans' ways of being together. These are final codes in this section.

Social Pacts and Human Rights

According to Rosa and Gonzalez (2012), "[rights] result from efforts to open spaces for liberty. They are fully artificial, and a consequence of the creation of norms to order social life" (p. 8). Through rights, individuals acquire new properties as subjects; they become agents and citizens. But how did these modern and artificial attempts to deal with norms emerge? Rosa and

Gonzalez traced this tendency back to the effects of the European religious wars of the 16th and 17th centuries, which turned kingdoms into nation-states that were built on the values of equality and justice. This new state of affairs was legitimized through social pact theories, stemming from Hobbes and Rousseau, which led to two different modern versions of what was then called *moral science*; and are now called ethics and social science. This, they argued, was the historical precedent for the modern tendency to dichotomize the domains of 'is' and 'ought.'

As noted, social scientists have tended to privilege the ontological, epistemological, and methodological dimensions of paradigms whereas axiology is reserved for moral philosophers. It can also be noted, however, that trends within philosophies of social science tend to mirror trends in the surrounding culture (Harrist & Richardson, 2012). For this reason, it is useful to look at how notions of 'rights' have evolved over the years.

Rights. McDowell, Libal, and Brown (2012) indicated that there are two major categories of human rights: civil and political rights on the one hand, social, economic and cultural rights on the other. According to these authors, a historical division emerged during the Cold War between the Western industrial nations, which foregrounded democratic capitalism, and the Eastern bloc countries, which favoured communism. This division resulted in two separate international covenants, which institutionalized a division between civil and political rights, championed by Western states; and economic, social, and cultural rights, prioritized by many communist states and developing countries.

Civil and political rights include the right to life; the right to security of person and bodily integrity; freedom from torture and slavery; freedom of expression; privacy; property; freedom of religion or belief; political participation; right of equality under the law; self-determination, and so forth. Social, economic, and cultural rights, meanwhile, include the rights to life,

education, health, work, social security and an adequate safety net for those who cannot work, housing, food, water, family, and participation in the life of the community. Since the Cold War, McDowell and colleagues (2012) reported a belief that the United States has championed civil and political rights as fundamental human rights, while conceiving of social and economic rights as belonging to a lesser category that might be described as 'human needs.'

Harrist and Richardson (2012) described the modern solution to navigating these differences as *liberal individualism*, which for them, is a unique modern approach to ethics that attempts to privilege strong self-interest, on the one hand, while also privileging respect for the rights and values of others on the other. According to these authors, "*liberal individualism* refers to broad premises about living that are shared by many different, otherwise antagonistic moral and political outlooks" (p. 40). Both conservative and liberal political outlooks, for example, converge on the importance of individual rights and freedoms, although they diverge on what freedom *means* or what the essential rights *are*. Both also rely on large-scale, impersonal mechanisms to sort out differences: the market in the case of conservatives, and the state, for liberals.

However, nuances in various the meanings of 'freedom' and 'rights' are relegated to the societal backdrop of most individuals' lives. Taylor (1989) theorized that people have great difficulty articulating their moral intuitions. Rather, "the moral ontology behind any persons's views can (and usually does) remain largely implicit. The average person needs to do very little thinking about the bases of universal respect because everyone just accepts this as an axiom" (p.9). He added that there is a great deal of motivated suppression involved in our inarticulacy in this domain, "because the pluralistic nature of modern society makes it easier to live that way"

(p.?). I would like to stop at this point quite deliberately. I will next summarize this section and attempt to pull out the implications for counselling; particularly as it relates to change in systems.

Summary and Implications

This chapter has been an attempt to report on a sample of books and articles from social sciences adopting a top-down view of problems in human functioning. Common themes in this sample were an emphasis on the role of belief systems in systemic change, and an implicit focus on the axiological dimension of paradigms.

Three categories emerged from this body of literature. First, there were two categories of self-systems: one at the individual, and one at the aggregate level. These consisted of the following codes: *meaning, control, becoming,* and *emotions* at the individual level, and *culture, cultural syndromes, worldviews, discourses, standards, norms,* and *values* at the aggregate level. The elements in this category, though process-like, appeared to me as being strongly implicated in the structuring of selves in the current moment.

The third category included processes that lead to and condition the development of self-system, or that *determine* their structures in Znaneicki's (1934) sense. The following codes fell into this later category: *affect, collective cognition, economies of affect, ethical becoming, embodiment,* g*rounding, identity, metaphors, neoliberalism, ontogeny, oppression, performativity, potentials, resistance, social justice,* s*ocial pacts*, s*ubjectivity, value neutrality, and technologies of power and self.*

Summary

This chapter has been an attempt to respond to the first of my initial research questions: (1) what is the nature of the relationship between self and culture? A small sample of the diverse bodies of literature that respond to that question suggests that 'selves' are to ideology what

bodies are to biology. Self-systems are discernible at both individual and aggregate levels. This notion of 'both individual and aggregate' is perhaps analogous to Maturana and Varela's (1987) distinctions of first- and second-order autopoietic unities: single and multi-cellular organisms, respectively.

Sevles are structured by values. As with biological systems, the boundary of the self-system confers its identity, and there is a process leading to the creation of such identities. Identities are rooted in values, which are often poorly articulated, and which are founded on an emotional, not a rational basis. Mascolo (2011) wrote, "[Maturana] says rational arguments can convince only the people who are already convinced through prior emotional choices" (p.?).

Consequently, when identifications are called into question or are ascribed with negative connotations, those holding the identifications will typically respond by pointing to some objective (explicit) standard, such as a religious text, a charter of human rights, a professional code, a legal code, or some such, which is a tendency underscored by an assumption of having privileged (unobscured) access to the reality this external code 'reflects.' Selves in the modern era find notions of objectivity useful in handling uncertainty. If selves knew what happened after they die, I suspect this tendency would shift.

As structuring elements of self-systems, values collect emotional significance in the course of self-development, and they potentiate the ideological space in which self-systems operate. In their movements through social space, and in dealing with the affective potentials loading that space, selves use roles and implicit standards as navigational tools. The standards for role performances are encoded, usually tacitly, in discourses, which function as a normative space containing an implicit checklist of loosely agreed-upon SOPs. Selves choose role performances in by using the values they have absorbed in the course of development to adopt

identifications. Identities express of the values that structure selves currently, and they often coalesce into group mindsets.

Increasingly, therapists are called upon to intervene on the dysfunctional assumptions held within collective mindsets (or cultural identities) – *dysfunctional* being a problematic notion, of course, within discourses of social justice. Change in self-systems involves the problem of changing values, as well as the norms that have coalesced around these values. Change in such systems is constrained by a backdrop of existential insecurity in two forms: perceived threats to ontological insecurity potentiated by the possibility of failing within the neoliberal project (in the West at least), and existential insecurity rooted in fears of either condemnation or meaninglessness, accompanied by myths which tend to valorize certainty and feed ideological dependence on objectivity.

It can be noted that 'the problem' is not articulated this way (as a problem of value-and-emotionally laden dysfunctional identities viz. effective collective action) within any of the models of therapy, systemic or non-systemic, summarized in Chapter IV. Counselling psychologists nonetheless deal with these problems routinely. I will next articulate the current issues in handling these problems, as a set of implications.

Implications

I recently read an article in the New York Times entitled *The Sexual Misery of the Arab World* (Daoud, February 12, 2016). The author concluded the article with the statement, "people in the West are discovering, with anxiety and fear, that sex in the Muslim world is sick, and that the disease is spreading to their own lands." Daoud seemed to be describing deep undercurrents of anxiety in Arab societies that structure man-woman-sex relationships. More accurately, one might say this author was pointing to a particular economy of affects, structured according to

norms in the Arab world. However, in the context of globalization, perhaps Daoud (February 12, 2016) was correct to assert that the modern West will need to confront, more and more, practices and mindsets that it find most radically *other*.

In the past week, for example, I have witnessed an uproar in my own city, because apparently, some young men from the Arab world were interested in sharing their wisdom here, in a public forum, about the virtue of rape as a teaching method for women. The headlines in relation to this have triggered me to think of a client I saw for a period of time, an Arab woman, who told me her story of growing up in Saudi Arabia. Her story of having her virginity stolen, the only thing that conferred her any value, by a classmate. Her story of being blamed for her devalued status. Of being blackmailed into attending parties where her rapist would share her with 25 or so of his friends. Of learning English by watching Oprah, of marrying the first man who came along and convincing him to move to Canada. She described what can only fairly be called *a culture of sexual predation*. And where does her initial rapist live today? He lives in Toronto.

Her story, funnelled into the present moment, was an intensive seminar in the ephemeral thing we call social justice. Increasingly, as Rupani (2013) noted, counselling psychologists are being called on to do more of this ephemeral *thing*. But what *is* it, and if we are looking for actionable understandings, how do we 'do' social justice in the practice of therapy? Moreover, we are dealing with something that falls outside of the purview of what social science paradigms tend to deal with: we are in a domain that deals with notions of how things *should* be, not how they *are*. We are dealing with the valued mindsets of aggregate self-systems, too. So what are the main considerations if therapists are aiming for effective action in the domain of social justice? Do counselling psychologists have anything to contribute to better understanding this?

Social justice. Perhaps it would be a challenge within the profession's current form. If we are now dealing with the axiological dimension of paradigms, it should not be surprising that students of social science find social justice mandates confusing. The dichotomizing of the is/ought domains can make it difficult to know how to respond to issues that we consider morally nuanced. How do we know when we are doing social justice effectively, versus imposing our personal biases on our clients? Operating within our current paradigms, we run the risk of becoming either moral relativists, or tyrants.

Along with Drs. Doyle, St. George, and Wulff, I am currently involved with a research project at CFTC about the very topic of how therapists (and particularly novice therapists) talk about issues of social justice in sessions. Part of my role for this research has been to conduct a literature review. My first step was to search for a definition, or some professional consensus about what social justice *is*. Of course, social justice is described differently in literature of different disciplines. In occupational therapy, for example, it is framed as a human rights issue (Nilsson & Townsend, 2010). Meanwhile, my experience with social justice in training as a counselling psychologist has largely been framed as an issue of multicultural counselling competence (Arthur & Collins, 2010; Davey et al., 2011). Within this discourse, students are asked to be mindful of their cultural positioning and to pay attention to how it affects their interactions with differently-positioned others.

Oppression. In all of these different views of social justice, however, a common thread is that participation in society should not be limited unfairly due to prejudice and discrimination. Unfair limitations rooted in prejudice or discrimination are often summed up as *oppression* (Arthur & Collins, 2010). Moreover, oppressive discourses are viewed as being enacted in interactions in peoples' day-to-day lives, or in institutional practices along the lines of various

isms: racism, sexism, ableism, heterosexism, ageism, and so forth (St. George & Wulff, 2014). Thus, systems of oppression are generally linked to immutable and often visible characteristics such as skin color (Mint, 2010). Basically, the isms involve assumptions about the relative inferiority, superiority, or deservingness of individuals according to inherited and/or trait-based identity statuses.

However, 'identity' happens along much broader lines than gender, ethnicity, sexual orientation and the rest. I have touched on the process of developing value-laden identifications which can coalesce into group mindsets. Social justice considerations apply here, too. Especially, perhaps, as social scientists are increasingly called upon to intervene in group mindsets considered to be dysfunctional.

For now, however, many students of social science, applied or otherwise, learn that the antidote to oppression is activism. As such, it is not at all surprising that the University of Tennessee documented a very significant increase in enrollment after adding advocacy as a competency to their training model (Rupani, 2013). Students are well aware that they are supposed to fight oppression, but apart from speaking up or speaking out in certain contexts, the 'actionable understanding' or piece is lacking here.

Value neutrality. As noted, carrying out social justice mandates is a real difficulty, in part because we lack facility in dealing with values and cultural beliefs (Harrist & Richardson, 2012; McDowell, Libal, & Brown, 2012). Harrist and Richardson (2012) complained that,

> Liberal individualism seems to be harmfully embroiled in the paradox of advocating relative neutrality toward all values as a way of promoting certain basic values of liberty, tolerance, and human rights. Individuals hope to protect their rights and prerogatives while ensuring that no one can define the good life for anyone else. However…if we

> cannot reason together meaningfully about the worth of ends…a slide toward moral relativism and social fragmentation seems inevitable. (p. 40)

While Harrist and Richardson (2012) were critiquing counselling psychology's blind affiliation with "the unexamined assumptions and guiding values" (p. 39) of the paradox-embroiled surrounding culture, Sugarman (2015) was a little more pointed in his critique:

> Psychologists have been unwilling to admit their complicity with the specific sociopolitical arrangements, for to do so would undermine a credibility forged on value neutrality presumed to be ensured by scientific objectivity and moral indifference to its subject matter. Consequently, as the historical record suggests, psychologists have served primarily as 'architects of adjustment in preserving the status quo and not as agents of sociopolitical change. (p. 13)

In all, it seems that the tensions I have described here could be viewed as examples of first order change. On the one hand, you cannot have oppression without an oppressor; on the other, oppression invites activism. What then, would constitute a meaningful shift from vacillating around oppression and activism? What would it look like, in our practices, to foster the development, in each individual, of an internalized sense of collective responsibility?

On that note, I will conclude this chapter. In this chapter, I have responded to the first research question: (1) What is the nature of the relationship between self and culture? In the summary for this chapter, I have specified a domain of responses to the second question: (2) How is this relationship relevant to issues of change in systems of various orders of complexity? In the next chapter, I will develop that relevance further, and respond to the third question, about the implications for the field of counselling psychology.

Chapter VI

SUMMARY AND IMPLICATIONS

This final chapter will be an attempt to summarize this work in its entirety as a theoretical product, and to draw out the implications for counselling theory and practice. Here, I will focus on the latter two research questions: (2) How is this relationship between self and culture relevant to issues of change in systems of various orders of complexity? and (3) What are the implications for the field of counselling psychology, specifically? The theoretical product of this analysis will take the form of a response to question (2), using Znaneicki's (1934) method of analytic induction. Following that, I will articulate some implications.

Theoretical Product

Aphorism comes from the Greek word for 'delimitation' and literally means a 'distinction' or 'definition.' An aphorism is a concise expression of a general truth. Wittgenstein, for example, expressed his ideas about cognition and language in a series of aphorisms, such as this one: *An inner experience stands in need of outer criteria* (aphorism 580, Wittgenstein, 1958). It appears there was great variability in how he worded his aphorisms, but they seemed have some logical flow, and could be read as an attempt to summarize his thoughts in such a way that any reader of his work could easily isolate one thought from the larger stream and interact with it.

In keeping with Znaneicki's (1934) methodology of analytic induction, which calls upon researchers to identify universally applicable laws, I will summarize my work up to this point with a series of aphorisms, while fully acknowledging that these are *not* universal laws. Rather, these can be read as condensed interpretations of ideas that have emerged repeatedly in a sample of the literature on (issues relevant to) change processes in systems, using the techniques of

grounded theory. Some are my own inferences, since a major objective of qualitative research is to go beyond current understandings.

Aphorisms

1. Biological systems are structure-determined and exhibit operational closure.
2. Aviation metaphors depict this serviceably (e.g.: blind landings).
3. Biological systems that use language are observing systems (or observers), and any distinctions made by observers are determined by the structure of those systems, given a particular history of interactions with the medium.
4. Distinctions regarding concrete objects are usually uncontroversial (e.g.: "that is a table"), but distinctions regarding social phenomena can be controversial (e.g.: "that is a black person." If this distinction seems uncontroversial, see SNL's video: *The Day Beyoncé Turned Black*).
5. Descriptions are secondary to distinctions, and create another layer of potential controversy, sometimes about the basic properties of objects, like colour, but usually about meaning.
6. Problems arise in human functioning.
7. The problems that psychologists deal with have some relationship with the distinctions and descriptions used by observers, but there is a lack of broad consensus about the nature of that relationship.
8. Instead, psychologists have devised multiple explanations for these problems ranging from faulty processes in the physiological domain (e.g.: neurotransmitter climate), to faulty processes in the psychological domain (e.g.: dysfunctional core beliefs), to faulty processes in the interpersonal domain (e.g.: insecure attachment patterns; pathologizing

interpersonal patterns) to faulty processes in the sociocultural domain (e.g.: a privilege/oppression complementarity).

9. Humans have created disciplines (e.g.: psychotherapy), and schools within disciplines (e.g.: cognitive therapy), that respond to these problems – according to preferences for particular assumptions about problems in human functioning.
10. Preferences for particular assumptions are likely sponsored by the emotional investments evolved throughout the history of interactions of the observers espousing them.
11. Psychology is a profession that contracts change facilitation services, but it adopts an approach to change that is poorly integrated with knowledge from surrounding sciences.
12. Psychology is stuck in a first-order cybernetic process of attempting to resolve the problem of systemic change by prescribing interventions (treating symptoms) coupled with perturbing interventions (treating meaning).
13. If psychology were successful in treating problems of human functioning at higher systemic levels, it would cease to exist.
14. Within the discipline of psychotherapy, a debate has arisen between various schools about 'what works in psychotherapy' as a response to conflicting injunctions from surrounding disciplines in the service-delivery context, which target the ethical identity of the discipline. (E.g.: "You must prove your methods by objective means," and "if you attempt to prove your methods using objective means, you are architects of adjustment complicit with the privilege side of the privilege/oppression complementarity.")
15. Psychology finds itself in an ethical double bind, and has attempted to resolve this by creating explicit professional standards and codes of ethics. The problem of 'what is to be

changed and how' is resolved by the requirement that practitioners demonstrate knowledge of the ethical standards *particular to their specified scope of practice*.

16. Mainstream psychology seems to lack an awareness of how humans function, according to *systemic* conceptualizations within disciplines such as biology and various sociocultural sciences.
17. Humans have been conceptualized within neighbouring disciplines as (a) biological, and (b) ideological *systems*. These outlooks represent different levels of structural organization, and psychology sits at the interface between them. Practitioners in psychology should understand the processes that give rise to human systems at both levels, if its goal is to facilitate change in them.
18. Understanding systems is challenging and inconvenient, so the systems contracted to deal with problems in human functioning are likely to remain biased toward treating symptoms / protesting the treating of symptoms. This complementarity is sustained by its own inertia, and the focus is diverted from more radical pursuits.
19. Cyberneticians have, nonetheless, disruptively attempted to facilitate systemic understandings within the social sciences, and have emphasized the importance of feedback, drawing particular attention to notions of ecology.
20. They have been largely ignored, save for some family therapists.
21. Cyberneticians have suggested that higher orders of feedback within an ecology of complex interacting systems can be distinguished by this complementarity: the 'it' / the process leading to 'it.'

22. Systems have corresponding processes that give rise to the systems (e.g.: chemical systems / reacting; biological systems / knowing; ideological systems / being). These have also been called 'generative mechanisms.'
23. Cyberneticians see human pathology as rooted in epistemological error, which is an error in the domain of effective knowing (or cognition).
24. Errors of knowing can lead to errors of being, but we do not have a word, analogous to 'epistemological,' for errors of being.
25. Errors of being are ways of being together that have anti-social effects: they undermine ecosystemic processes, and are felt by individuals as a desire to 'be separate from.' Gottman and DeClaire (2001) described this instinct as 'turning away from' or 'turning against,' which suggests that a desire to separate may manifest variably as avoidance or aggression.
26. Being is a fundamentally social process, as one cannot separate from nothing.
27. In the sociocultural sciences, ideological-being systems are called 'selves.' Selves are discernible at both the individual and aggregate levels, like cells.
28. Knowing-systems use tools to solve dilemmas; being-systems use technologies. Tools solve problems of doing-process; technologies solve problems of being-process.
29. Systems have a structure that can change, but they have an organization that cannot because the organization of a system imparts identity to the system; without organization, systems cease to exist.
30. Self-systems are structured by values, which are held in place by norms, which are potentiated by affect (an emotional charge).

31. Values collect emotional significance in the course of self-development, and because they have an emotional (versus rational) substrate, selves show a great deal of inarticulacy about their value orientations.
32. Value orientations, in turn, are structured by human anxieties: specifically, anxieties relating to existential concerns (problems in the domain of being). The first problem is non-existence (or *existential anxiety*); the second is irrelevance (or *ontological insecurity*).
33. Humans can attenuate the first problem by achieving a sense of symbolic immortality.
34. Humans adopt values with the implicit goal of attenuating both concerns. All human activity is organized around attenuating one, or both (if the first is considered to be meaningfully attenuated).
35. For example, the human activity of 'getting married' attenuates both because, (a) marriage is a ceremony that symbolically fuses separate entities into something 'larger-than-self,' (b) promises reduce uncertainty, and (c) people experience themselves as fulfilling cultural injunctions pertaining to relevance and goodness: implicit notions of how persons 'ought' to be. This is why people still get married.
36. Notions of 'ought' are circumvented in most research, training, and practice because of a "disguised ideology of liberal individualism" that underscores the profession of psychology and manifests in a "paradox of value neutrality." Consequently, professionals in psychology have developed greater facility dealing with notions of 'is' than notions of 'ought.'

37. Some notions of ought, however, cannot be ignored. The profession deals with those by structuring protocols regarding their handling into codes of ethics (e.g.: the mandate that clinicians will report child abuse).
38. The rest of the 'oughts' are relegated to the domain of 'social justice' and practitioners are asked to assume responsibility for handling those issues according to their own judgement. However, the standards are more lenient (aspirational) regarding *social* justice than they are regarding justice proper (a minimum standard).
39. Standards are technologies that demarcate normative boundaries, and selves use these to navigate moral and ideological space.
40. Standards apply to roles, which are names distinguished by observers for different modes of being, or identities.
41. Identities are placeholders for selves 'in this moment' and express the values that structure selves currently.
42. The standards for role performances are encoded, usually tacitly, in discourses. Discourses saturate normative space with checklist options for loosely agreed-upon operating procedures.
43. Aviation metaphors depict this serviceably (e.g.: SOPs).
44. Selves adopt *identifications* by using the values they have absorbed in the course of development.
45. Identities can coalesce into collective identities; some are even recognized within the law and accorded particular rights.
46. Role discourses for some identities contain SOPs that will have anti-ecological effects if enacted (e.g.: The KKK; Wall Street bankers).

47. Professionals in psychology are being called upon increasingly to intervene at the level of group dysfunction, be it in families, or be it in broader, but less explicitly defined groups – under the banner of social justice.
48. Effective interventions at the group level are called second-order change; this kind of change serves to recalibrate feedback in a way that leads to more ecologically sustainable, and emotionally tenable outcomes.
49. There is no such thing as an outcome. *Outcomes* refer to accepted ways of punctuating change facilitation practices relative to the question of 'what works?' The changes that we call 'outcomes' are, in systemic terms, 'recalibrations.'
50. Second-order recalibrations happen in individual self-systems when value conflicts (or axiological impediments) carry sufficient affective potential to catalyze a restructuring of the self-system's values.
51. Change happens via value conflicts in aggregate self-systems as well, but the conflicts are more distributed and thus the effects are felt more slowly.
52. Power hierarchies obfuscate feedback processes.
53. Change in aggregate systems results in new norms.
54. Comedians are very good change facilitators because they understand how to manipulate value conflicts as well as how to attract and maintain audiences, which means they have an increased likelihood of influencing norms.
55. Ecologically calibrated norms will direct selves to act in ways that lead to effective action in complex domains such as long-term species survival.

56. Learning what is effective in complex domains requires attentiveness to consequences (feedback). Because feedback is distributed in aggregate systems, it should be sought deliberately, particularly from devalued members, or it can escape notice.
57. Norms will be necessary until existential concerns regarding relevance are resolved.
58. Until then, selves will continue to appropriate whatever in their environment appears to attenuate concerns over being (existence and relevance).
59. If, one day, selves believe they have relevance and stop seeking to appropriate it by performing in accordance with outer criteria, standards will no longer be necessary, and selves will evolve structurally.
60. Until then, it will be tempting to reference external and authoritative codes. As Wittgenstein mentioned: *An inner experience stands in need of outer criteria.*
61. I've learned a lot from my father and mother.

Implications for Counselling Psychology

The implications for what counselling psychologists can do to facilitate meaningful, or second-order change in any (social) systems – be they family, political, economic, workplace or other – seem to me, a relatively short list. If I were asked to boil everything I learned in the course of this project down to a very brief summary, I would say this:

If objectivity is impossible, owing to operational closure, then we can know nothing for certain; rather, the reality of our social world is, as Watzlawick and colleagues (1974/2011) have said, a function of what a sufficient number of people have agreed to call real. Since societies are little more than "pluralistic aggregations bound by general norms and backed by the force of law" (Rosa & Gonzalez, 2012, p. 18, citing Hooft, 2006, p. 111), it matters which norms we agree to grant structuring privileges in our lives. The next step in human development is to

nurture norms that are better calibrated within a broader ecology. A related problem, moving forward, is to generate consensus about what it means for a collective to 'know' how to do something, effectively, in a complex domain of action.

This is not a straightforward project, however. If anything will get in the way, it will be the assumptions people have absorbed relating to what exists, what is possible, and in particular, what should be. According to this literature, people are not generally articulate about should be, while at times, they can be very certain about what exists. There is a question in here about how to become conversant with what might be called *conservative certainty*. I would define this as a protective stance that some individuals will adopt in relation to their own belief systems, particularly in cases of uncertainty or threat. To become conversant with those who adopt such a stance, the literature seems to imply that existential needs – existential anxiety and ontological insecurity in particular – need to be attenuated (see Wrenn, 2014). However, in the context of a neoliberal political economy, this is a real challenge, as there are winners and losers.

A fundamental priority that I am hearing in this literature is the need to prioritize a basic level of security and opportunity for all members of society. Otherwise, those who are failing at the neoliberal project – or whatever the unattainable ideal in their particular cultural milieu – will be inclined to identify with ideological groups seeking certainty, if not also vengeance, retaliation, and even self-sacrifice (see Eidelson and Eidelson, 2005). Greenhall (2014) wrote on his blog: "It seems implausible. A utopian vision. Perhaps. But a Utopia built not of aspiration, but of necessity."

Implications for Training

Students and practitioners will need to develop skill at intervening on what I will call

anti-ecosophical group mindsets. I prefer this to 'dysfunctional' because my wish is to imply that some ways of thinking/doing/being will tend to invite negative feedback corrections from higher orders of process within the overall ecology more than others. They are 'wrong' not because they are wrong by anyone's arbitrary standards. They are wrong because they will tend to breed pathology and correction, either immediately or downstream. But what is to be done? If we cannot know what *is* or what *should be* with any certainty, how can we decide anything?

The beauty of Maturana's ontology, and cybernetic epistemology, is the emphasis both on recursion and the ability for self-reflection. What it amounts to, in my reading, is an invitation to pay attention to consequences. In Dr. Tomm's initial lecture about Maturana's theory of knowledge, he presented a chart that summarized his understanding of how Maturana's ideas applied to the evolution of consciousness. The essential thesis impressed upon me from this lecture was that, through increasing recursions of consensual coordinations, humans evolve to increasing levels of consciousness and intentionality. At the highest level of awareness, freedom means: the freedom to choose among possible outcomes. This freedom is rooted in an agent's awareness of the distinctions he or she draws in his or her observations, as well as associations and sequences among these distinctions. (K. Tomm, personal communication, November 20, 2014).

In Maturana's theory, along with awareness of the consequences of one's own ideas and actions comes responsibility for choosing them. If, in general, the consciousness of individuals does indeed tend to coalesce, what does effective collective action mean, and what is responsibility, in the context of large groups of beings who have come under the influence of perceptions that undermine sustainability and promote practices that are untenable? This question drives at a deeper question that has to do with how we decide, within a context of

pluralism, which ideas and behaviours are most effective and responsible. Thus, as counselling psychologists have noted, it is very much a question of "what works," except that the criteria of validation may need some recalibration.

Keeney (1983), following Varela, has suggested that humans can discern higher orders of ecological feedback by attending to the complementarity: the 'It' / the process leading to 'It'. As far as modern selves go, the literature suggests that the processes leading to who they are in this moment have a lot to do with values, identifications, norms, and the like. These are questions about *axiology*, which concerns ethical and aesthetic ideas about 'the good life' (Hedlund-de Witt, 2012). Unfortunately, axiology is often considered to be the domain of moral philosophers, and most psychology research is devoid of explicit axiological considerations (Taylor, 1989). As I have noted, there is a tendency in social science research to privilege the ontological, epistemological, and methodological dimensions of paradigms.

Learn to deal with oughts. This is one implication of the research here. It sounds simple enough on paper, but surely it is not as easy as it sounds. I raised these concerned with Dr. Tomm through the paper I wrote for his class, in response to his lecture about Maturana. When he invited me to work with him the following year as a teaching assistant, we came back to this critique and reflected on it. Previously, Dr. Tomm had presented the ontological, epistemological, and methodological dimensions of mainstream paradigms in the natural and social sciences. His new idea was that we could try to articulate the axiological assumptions embedded within the paradigms, as well as the political implications of adopting them as preferences. Please see Appendix D for a summary of these ideas. Additionally, I developed some reflexive questions that could be asked of students to help increase their awareness of possibilities for change (see Appendix D). In particular, we were interested in inviting students

to adopt a more creative stance in relation to the problems facing humanity today, rather than a stance of deconstruction and protest. Those activities have their place but they are not sufficient.

Implications for Practice

Some current authors are well aware that change facilitators need to move beyond a preoccupation with deconstrcution. Nencini, Meneghini, and Prati (2015), for instance, describe *the generative method* for change in social systems, which is not about deconstructing, but rather, about generating meaningful alternatives. Though they published their article in a social science journal, they seemed to be adopting an industrial-organizational lens. They wrote, "since problems are considered to be socially constructed, interventions cannot be carried out as a series of 'best practices' whose efficacy can be considered independently from the context" (p. 42). Rather, "the change facilitator's role is to mediate between different possible forms of meaning and to promote alternative and more effective constructions of shared meaning" (p. 42).

They went on to articulate how this might be done, and in a step they labeled *the system analysis*, they went on to suggest that after investigating various dynamics in a system, the change facilitator should generate a report that presents "a sort of 'picture' of its functioning, by reifying some characteristics" because, doing so "deals with the laypeople's expectation of a sort of cause-and-effect approach" (p. 55). Really, though, "the goal of the change facilitator is to reduce the gap in the set of meanings held by the actors regarding the fundamental goals of the system, their role and the rules regulating the interactions within the system" (p. 55).

What I appreciated about this article was that it used the familiar rhetoric of Maturana and cybernetics, and even of counselling psychology, moreover, with the implication that 'change facilitators' have some role to play in larger systems than just families. There was also

some acknowledgement of the need to deal with different mindsets, as well as strategies for handling them and inviting more cohesion in the process.

On the other hand, their suggestions sounded reminiscent to me of reflecting teams. It would seem that in family therapy, part of the reason these teams work is that they generate variability in the distribution of possible meanings, and thus affect the stability of norms. Perhaps if counselling psychologists were to work on exporting the technology of reflecting teams to other domains of social activity, possibilities for change might open up. Indeed, there therapists who have attempted to focus on groups other than families as the unit of treatment, such as Holzman and Newman's attempts to popularize social therapy at the East Side Institute in New York (see Newman, 2003; Holzman 2011). Their ideas are very interesting, but so far they have written more from the perspective of theory rather than detailing the moment-to-moment specifics of social therapeutic practice.

Developing responsibility. Beyond the implications for training and practice of developing greater facility in dealing with notions of 'ought' and applying the principles of counselling theory and practice in broader domains, there are also policy implications.

Most Western cultures have practices that reflect consensus around the perceptions of 'success' as consisting of autonomous, self-made individuals striving for material superiority and environmental mastery (Hedlund-de Witt, 2012; Sugarman, 2015; Triandis, 1996). In such a context, can an individual 'know' how to contribute to the survival not only of its self, but also of its species as a whole? What if I am able to survive, with a bank account in the black, to 105 years of age on objectively poor lifestyle habits, and manage in that time to also produce both narcissistic offspring, and a landfill's worth of non-biodegradable waste: Was I successful? Was

my way of life species sustaining? What does it even mean to survive, and what are the ecological implications of surviving versus thriving?

The question of how we come to know the consequences of our actions is no small question, and even less so when the scale of action and consequence coalesces upwards. Say, nonetheless, through some gift of observational prowess (perhaps assisted by technology), I figure it out and become very adept at anticipating the effects of my words and actions even on very minute or distal outcomes. Say I also notice I belong to a species that behaves, collectively, in ways that are threatening to its own survival. If I notice this, are any actions that ensure my own survival up until my statistically projected life expectancy actually 'effective' if I have I have not enhanced the likelihood my offspring will also survive to theirs? This is where I see the existential piece as being particularly relevant. The answer might depend on one's belief about what happens after death. If reincarnation is assumed, for example, then 'effective action' with respect to survival would have a different meaning than if death is assumed to be final, because if I assume that I might end up back here one day, this may heighten my motivation to contribute to the ongoing health of the planet in each moment.

Say I decide also, after a period of focused observation, to place the locus of risk within unexamined cultural assumptions and corresponding practices, as did Heldlund-de Witt (2012). I then decide that it would be a worthwhile endeavor to devote my life's work to influencing cultural perception in the direction of sustainable outcomes. What kinds of actions count as effective in this domain? It seems that I would need to know how to choose among the multiplicity of available beliefs and select those that are most supportive of my species' collective well being without either becoming a moral relativist or a tyrant, or reducing all action

to the activities of deconstruction and protest without the ability to construct meaningful alternatives.

Conclusion

I have little idea how to accomplish any of this, but have some idea where to start. I know that insecurity (the existential and ontological varieties, among other threats to a sense of personal dignity and legitimacy) is threatening for humans. Insecurity provokes defensive reactions, and increased degrees of conservative certainty. If I adopt one 'cause' within the purview of social justice, it ought to be conveying the opposite of whatever calcifies such an anti-ecosophical mindset in all of us. Whether I accomplish this through a general way of being in my day-to-day life, or with a dramatic speech to the UN, does not particularly matter. However it may happen, and as Keeney once wrote:

> "Our only hope is that we learn to trigger the necessary higher order feedback processes before we destroy the planet" (1983, p.140).

I happen to agree, and hope that in some very small way, I have contributed to the CPA's (2000), injunction to participate in the process of critical self-evaluation of the discipline's place in society, and in the development and implementation of structures and procedures that help the discipline to contribute to beneficial societal functioning and changes.

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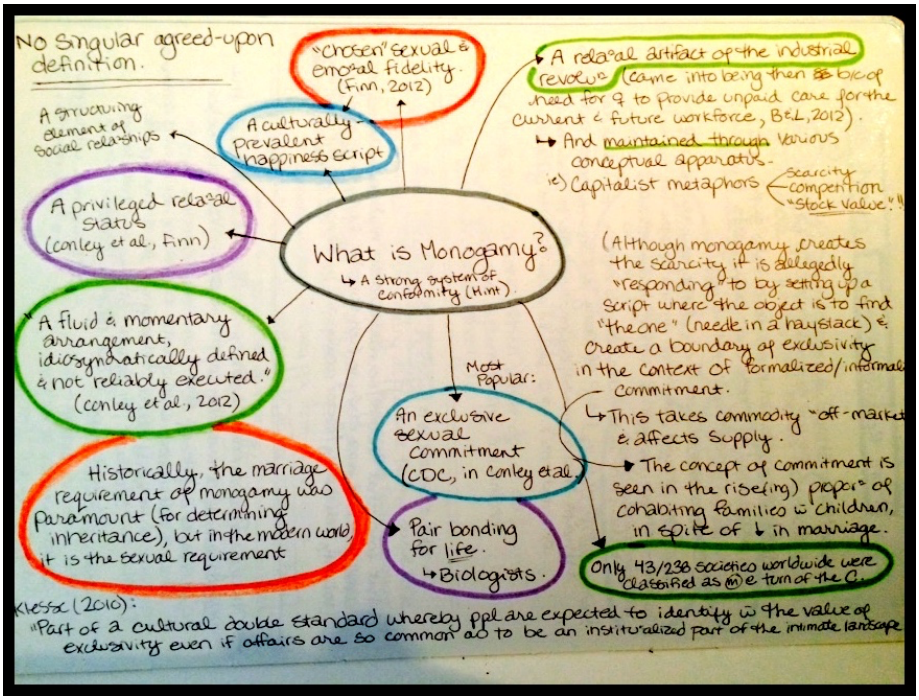
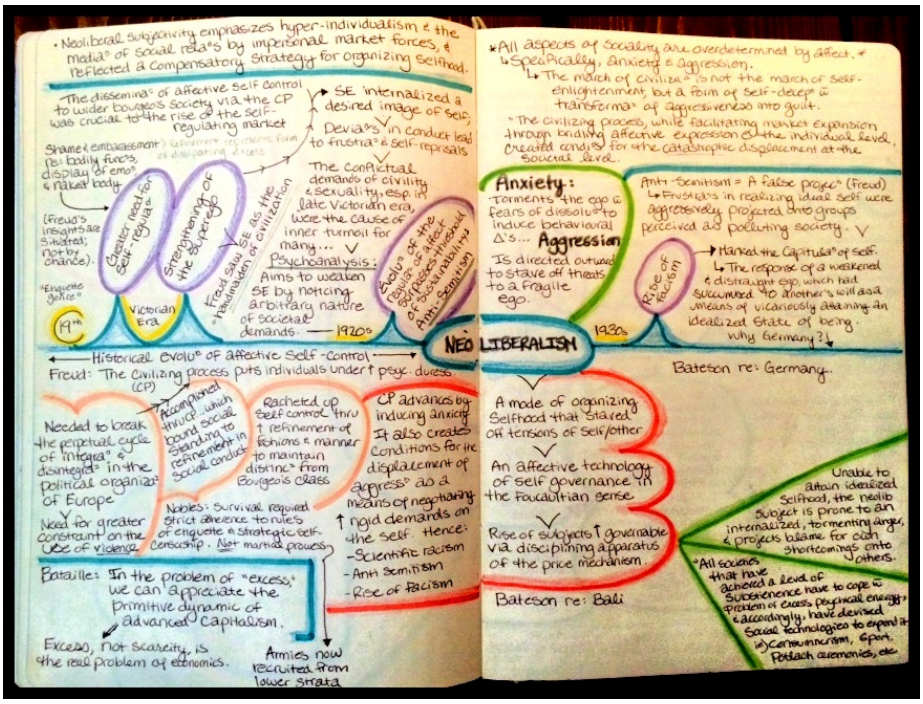
APPENDIX A
Journal Sample of Coding and Memoing Through Diagrams

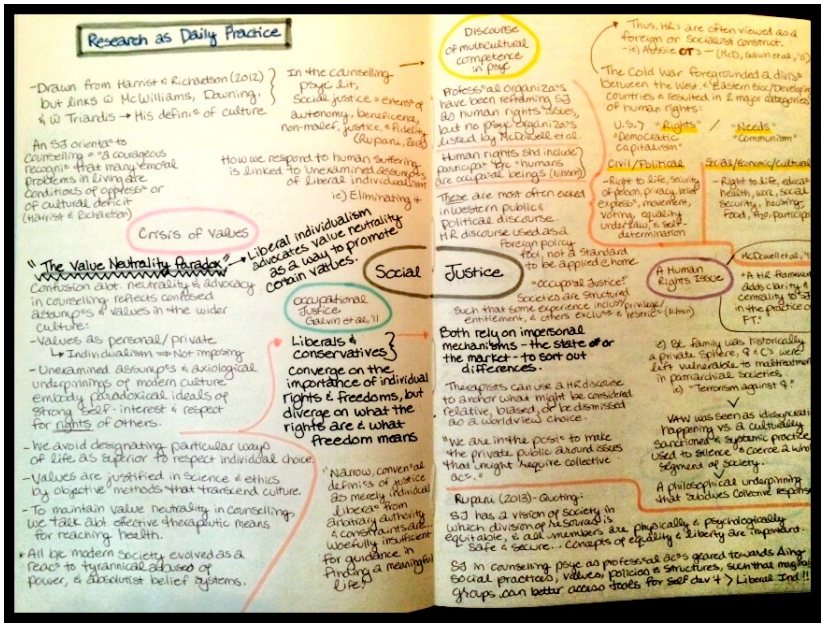
Sample A: Diagram depicting emerging understandings of monogamy, early in the research process.



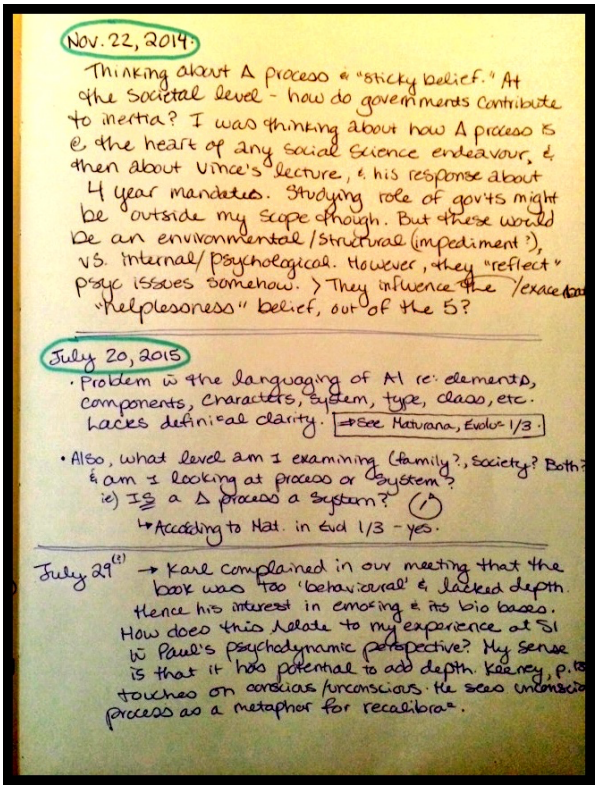
Sample B: Map depicting my emerging understanding of the ontogenesis of neoliberalism:



Sample C: A diagram of the literature pertaining to social justice, as part of the project I am involved with at CFTC with Drs. Doyle, St. George, and Wulff.



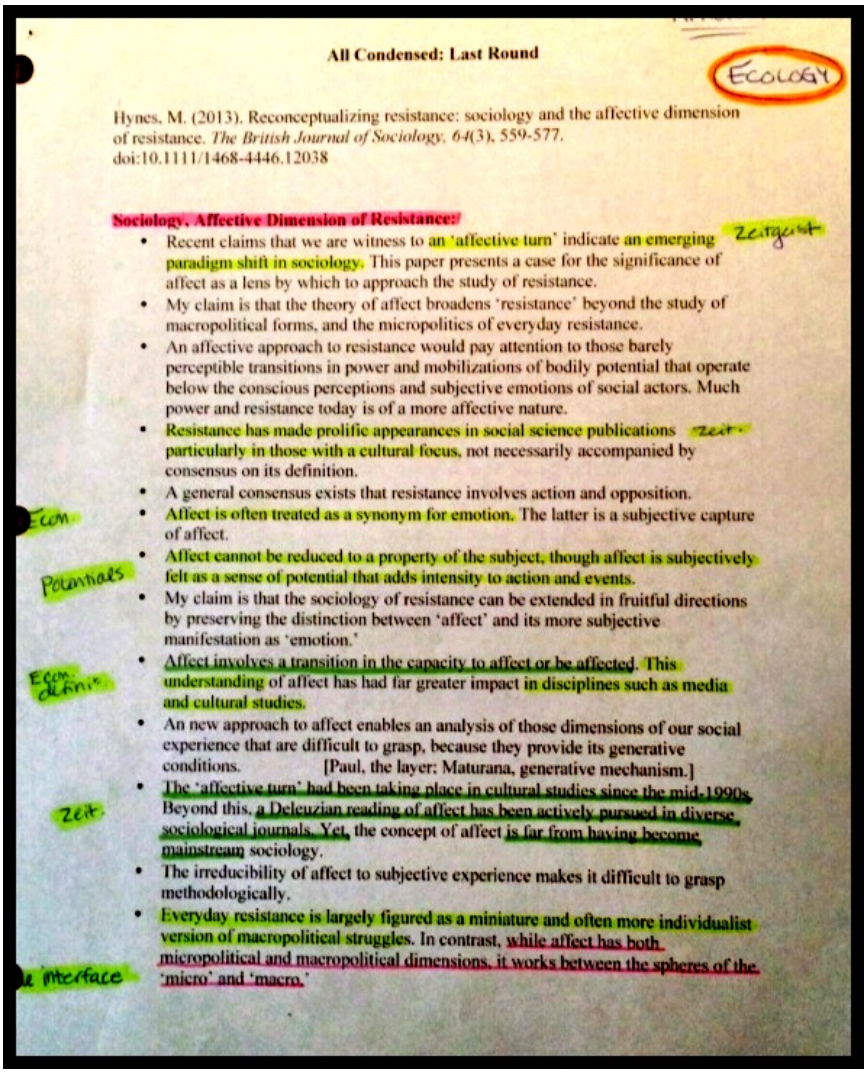
Sample D: Theoretical Memos.



APPENDIX B
Sample of Material Condensed through Comparative Analysis

Sample A:

I initially condense my notes on digital articles using iAnnotate software. When they are sufficiently condensed, I then print and highlight them, and make notes in the margins that include potential codes, links between categories, and memos. These are my notes from a particular article:



All Condensed: Last Round

Ecology

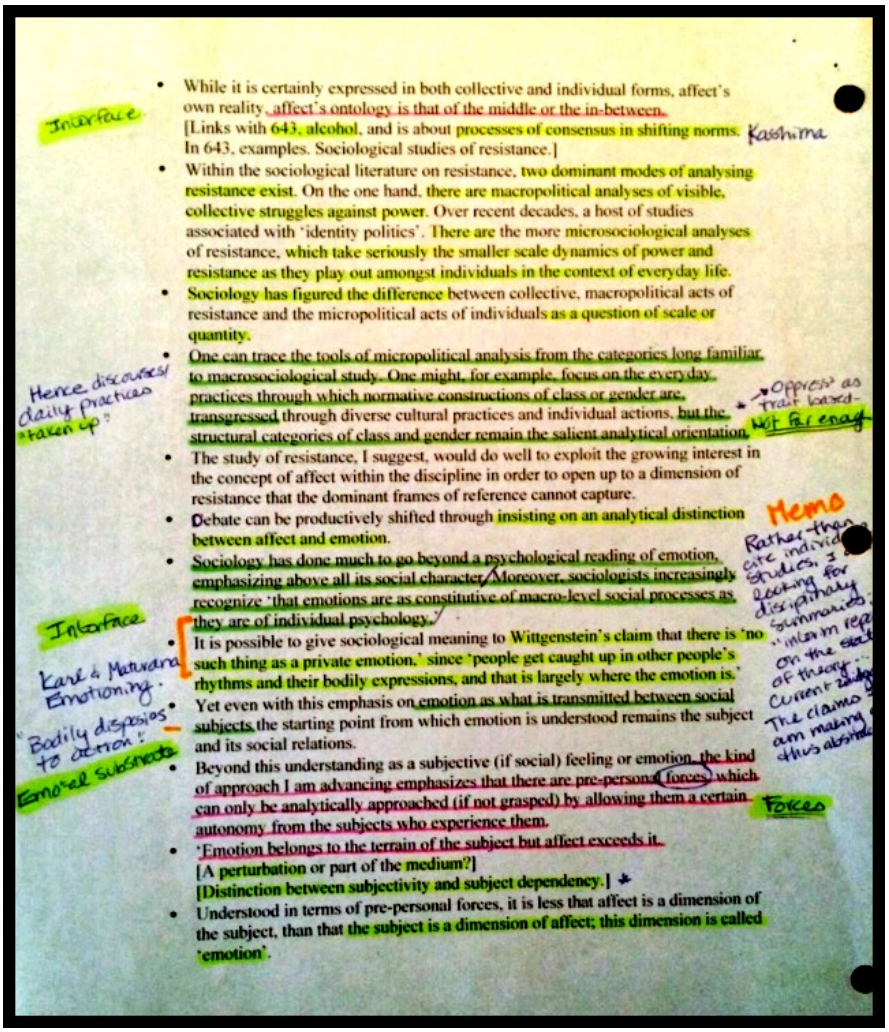
Hynes, M. (2013). Reconceptualizing resistance: sociology and the affective dimension of resistance. *The British Journal of Sociology, 64*(3), 559-577. doi:10.1111/1468-4446.12038

Sociology, Affective Dimension of Resistance:

- Recent claims that we are witness to an 'affective turn' indicate an emerging paradigm shift in sociology. This paper presents a case for the significance of affect as a lens by which to approach the study of resistance.
- My claim is that the theory of affect broadens 'resistance' beyond the study of macropolitical forms, and the micropolitics of everyday resistance.
- An affective approach to resistance would pay attention to those barely perceptible transitions in power and mobilizations of bodily potential that operate below the conscious perceptions and subjective emotions of social actors. Much power and resistance today is of a more affective nature.
- Resistance has made prolific appearances in social science publications particularly in those with a cultural focus, not necessarily accompanied by consensus on its definition.
- A general consensus exists that resistance involves action and opposition.
- Affect is often treated as a synonym for emotion. The latter is a subjective capture of affect.
- Affect cannot be reduced to a property of the subject, though affect is subjectively felt as a sense of potential that adds intensity to action and events.
- My claim is that the sociology of resistance can be extended in fruitful directions by preserving the distinction between 'affect' and its more subjective manifestation as 'emotion.'
- Affect involves a transition in the capacity to affect or be affected. This understanding of affect has had far greater impact in disciplines such as media and cultural studies.
- An new approach to affect enables an analysis of those dimensions of our social experience that are difficult to grasp, because they provide its generative conditions. [Paul, the layer; Maturana, generative mechanism.]
- The 'affective turn' had been taking place in cultural studies since the mid-1990s. Beyond this, a Deleuzian reading of affect has been actively pursued in diverse sociological journals. Yet, the concept of affect is far from having become mainstream sociology.
- The irreducibility of affect to subjective experience makes it difficult to grasp methodologically.
- Everyday resistance is largely figured as a miniature and often more individualist version of macropolitical struggles. In contrast, while affect has both micropolitical and macropolitical dimensions, it works between the spheres of the 'micro' and 'macro.'

Sample B:

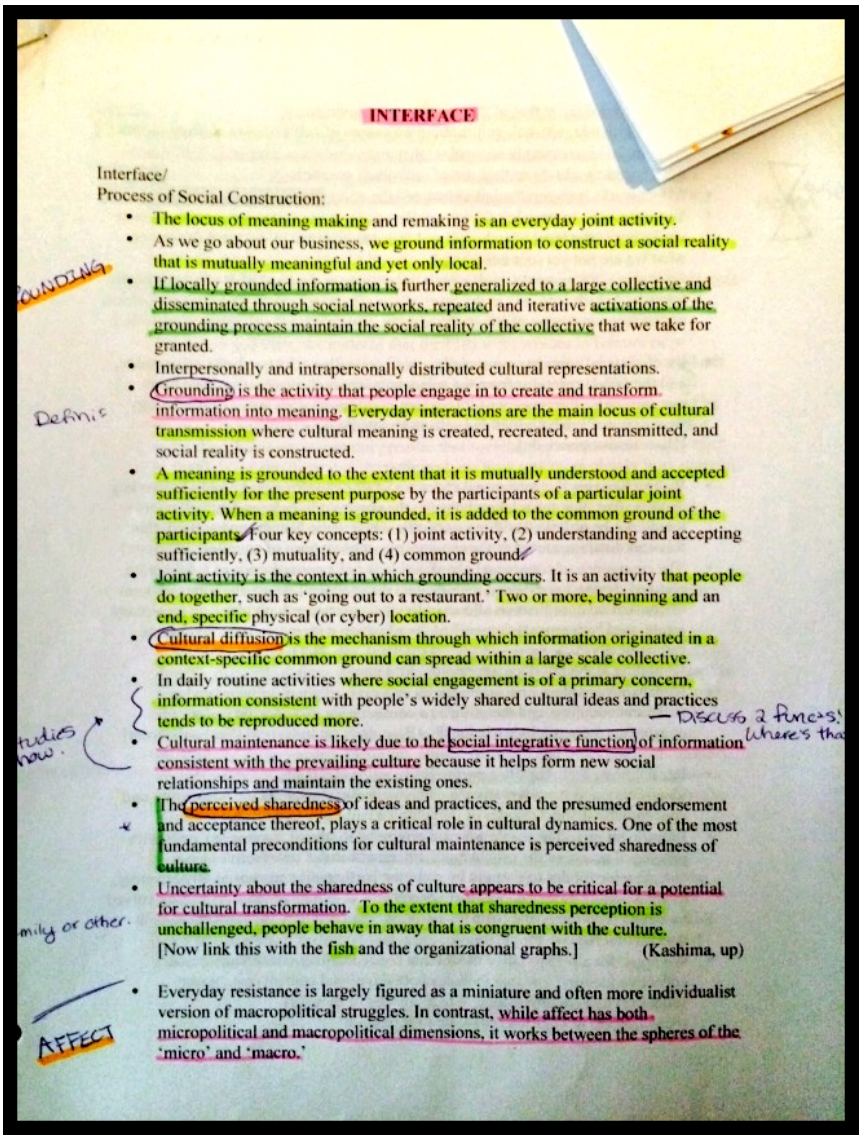
These are further notes from the same article in *Sample A*. The code '*Interface*' has emerged repeatedly, in this sample.



- While it is certainly expressed in both collective and individual forms, affect's own reality, affect's ontology is that of the middle or the in-between. [Links with 643, alcohol, and is about processes of consensus in shifting norms. In 643, examples. Sociological studies of resistance.]
- Within the sociological literature on resistance, two dominant modes of analysing resistance exist. On the one hand, there are macropolitical analyses of visible, collective struggles against power. Over recent decades, a host of studies associated with 'identity politics'. There are the more microsociological analyses of resistance, which take seriously the smaller scale dynamics of power and resistance as they play out amongst individuals in the context of everyday life.
- Sociology has figured the difference between collective, macropolitical acts of resistance and the micropolitical acts of individuals as a question of scale or quantity.
- One can trace the tools of micropolitical analysis from the categories long familiar to macrosociological study. One might, for example, focus on the everyday practices through which normative constructions of class or gender are transgressed through diverse cultural practices and individual actions, but the structural categories of class and gender remain the salient analytical orientation.
- The study of resistance, I suggest, would do well to exploit the growing interest in the concept of affect within the discipline in order to open up to a dimension of resistance that the dominant frames of reference cannot capture.
- Debate can be productively shifted through insisting on an analytical distinction between affect and emotion.
- Sociology has done much to go beyond a psychological reading of emotion, emphasizing above all its social character. Moreover, sociologists increasingly recognize 'that emotions are as constitutive of macro-level social processes as they are of individual psychology.'
- It is possible to give sociological meaning to Wittgenstein's claim that there is 'no such thing as a private emotion,' since 'people get caught up in other people's rhythms and their bodily expressions, and that is largely where the emotion is.'
- Yet even with this emphasis on emotion as what is transmitted between social subjects, the starting point from which emotion is understood remains the subject and its social relations.
- Beyond this understanding as a subjective (if social) feeling or emotion, the kind of approach I am advancing emphasizes that there are pre-personal forces which can only be analytically approached (if not grasped) by allowing them a certain autonomy from the subjects who experience them.
- 'Emotion belongs to the terrain of the subject but affect exceeds it. [A perturbation or part of the medium?] [Distinction between subjectivity and subject dependency.]
- Understood in terms of pre-personal forces, it is less that affect is a dimension of the subject, than that the subject is a dimension of affect; this dimension is called 'emotion'.

Sample C:

The next step was to fracture the data, and paste chunks of texts from various articles into a document for a recurrent code, such as '*Interface*.' This particular code was eventually identified as a sub-category of the larger category, '*Processes Leading to Self Systems.*'



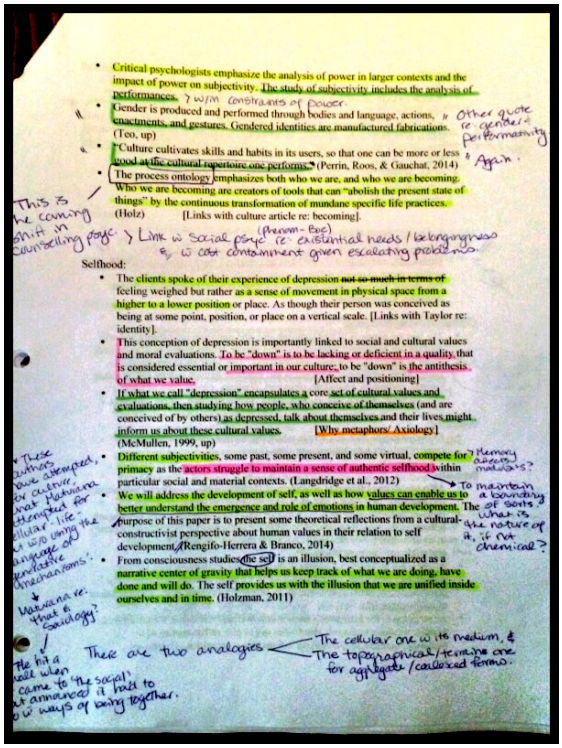
INTERFACE

Interface/
Process of Social Construction:

- The locus of meaning making and remaking is an everyday joint activity.
- As we go about our business, we ground information to construct a social reality that is mutually meaningful and yet only local.
- If locally grounded information is further generalized to a large collective and disseminated through social networks, repeated and iterative activations of the grounding process maintain the social reality of the collective that we take for granted.
- Interpersonally and intrapersonally distributed cultural representations.
- Grounding is the activity that people engage in to create and transform information into meaning. Everyday interactions are the main locus of cultural transmission where cultural meaning is created, recreated, and transmitted, and social reality is constructed.
- A meaning is grounded to the extent that it is mutually understood and accepted sufficiently for the present purpose by the participants of a particular joint activity. When a meaning is grounded, it is added to the common ground of the participants. Four key concepts: (1) joint activity, (2) understanding and accepting sufficiently, (3) mutuality, and (4) common ground.
- Joint activity is the context in which grounding occurs. It is an activity that people do together, such as 'going out to a restaurant.' Two or more, beginning and an end, specific physical (or cyber) location.
- Cultural diffusion is the mechanism through which information originated in a context-specific common ground can spread within a large scale collective.
- In daily routine activities where social engagement is of a primary concern, information consistent with people's widely shared cultural ideas and practices tends to be reproduced more.
- Cultural maintenance is likely due to the social integrative function of information consistent with the prevailing culture because it helps form new social relationships and maintain the existing ones.
- The perceived sharedness of ideas and practices, and the presumed endorsement and acceptance thereof, plays a critical role in cultural dynamics. One of the most fundamental preconditions for cultural maintenance is perceived sharedness of culture.
- Uncertainty about the sharedness of culture appears to be critical for a potential for cultural transformation. To the extent that sharedness perception is unchallenged, people behave in away that is congruent with the culture. [Now link this with the fish and the organizational graphs.] (Kashima, up)
- Everyday resistance is largely figured as a miniature and often more individualist version of macropolitical struggles. In contrast, while affect has both micropolitical and macropolitical dimensions, it works between the spheres of the 'micro' and 'macro.'

Sample D:

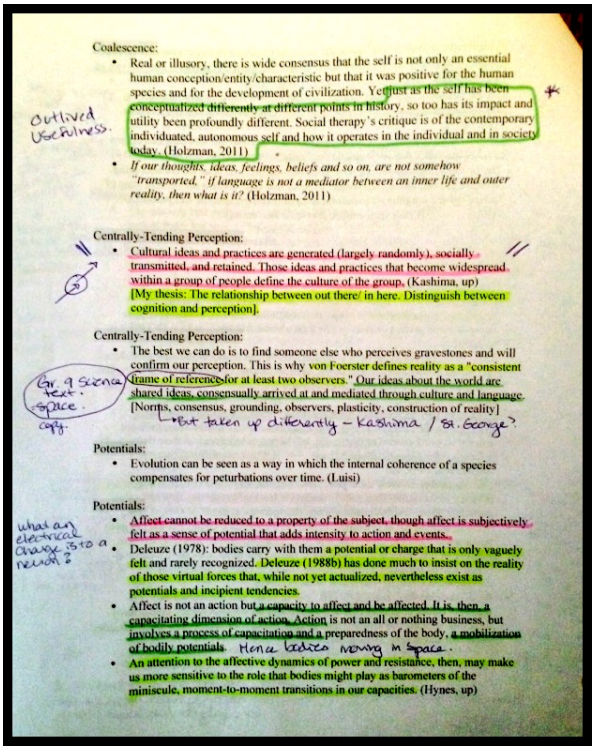
As a final step, I would re-read chunks of text within codes and categories, with special attention to links between them.



- Critical psychologists emphasize the analysis of power in larger contexts and the impact of power on subjectivity. The study of subjectivity includes the analysis of performances.
- Gender is produced and performed through bodies and language, actions, enactments, and gestures. Gendered identities are manufactured fabrication. (Teo, up)
- Culture cultivates skills and habits in its users, so that one can be more or less good at the cultural repertoire one performs." (Perrin, Roos, & Gauchat, 2014)
- The process ontology emphasizes both who we are, and who we are becoming. Who we are becoming are creators of tools that can "abolish the present state of things" by the continuous transformation of mundane specific life practices. (Holz) [Links with culture article re: becoming].

Selfhood:

- The clients spoke of their experience of depression not so much in terms of feeling weighed but rather as a sense of movement in physical space from a higher to a lower position or place. As though their person was conceived as being at some point, position, or place on a vertical scale. [Links with Taylor re: identity].
- This conception of depression is importantly linked to social and cultural values and moral evaluations. To be "down" is to be lacking or deficient in a quality that is considered essential or important in our culture, to be "down" is the antithesis of what we value. [Affect and positioning]
- If what we call "depression" encapsulates a core set of cultural values and evaluations, then studying how people, who conceive of themselves (and are conceived of by others) as depressed, talk about themselves and their lives might inform us about these cultural values. [Why metaphors/ Axiology] (McMullen, 1999, up)
- Different subjectivities, some past, some present, and some virtual, compete for primacy as the actors struggle to maintain a sense of authentic selfhood within particular social and material contexts. (Langdridge et al., 2012)
- We will address the development of self, as well as how values can enable us to better understand the emergence and role of emotions in human development. The purpose of this paper is to present some theoretical reflections from a cultural-constructivist perspective about human values in their relation to self development. (Rengifo-Herrera & Branco, 2014)
- From consciousness studies the self is an illusion, best conceptualized as a narrative center of gravity that helps us keep track of what we are doing, have done and will do. The self provides us with the illusion that we are unified inside ourselves and in time. (Holzman, 2011)



Coalescence:

- Real or illusory, there is wide consensus that the self is not only an essential human conception/entity/characteristic but that it was positive for the human species and for the development of civilization. Yet just as the self has been conceptualized differently at different points in history, so too has its impact and utility been profoundly different. Social therapy's critique is of the contemporary individuated, autonomous self and how it operates in the individual and in society today. (Holzman, 2011)
- *If our thoughts, ideas, feelings, beliefs and so on, are not somehow "transported," if language is not a mediator between an inner life and outer reality, then what is it?* (Holzman, 2011)

Centrally-Tending Perception:

- Cultural ideas and practices are generated (largely randomly), socially transmitted, and retained. Those ideas and practices that become widespread within a group of people define the culture of the group. (Kashima, up) [My thesis: The relationship between out there/ in here. Distinguish between cognition and perception].

Centrally-Tending Perception:

- The best we can do is to find someone else who perceives gravestones and will confirm our perception. This is why von Foerster defines reality as a "consistent frame of reference for at least two observers." Our ideas about the world are shared ideas, consensually arrived at and mediated through culture and language. [Norms, consensus, grounding, observers, plasticity, construction of reality]

Potentials:

- Evolution can be seen as a way in which the internal coherence of a species compensates for perturbations over time. (Luisi)

Potentials:

- Affect cannot be reduced to a property of the subject, though affect is subjectively felt as a sense of potential that adds intensity to action and events.
- Deleuze (1978): bodies carry with them a potential or charge that is only vaguely felt and rarely recognized. Deleuze (1988b) has done much to insist on the reality of those virtual forces that, while not yet actualized, nevertheless exist as potentials and incipient tendencies.
- Affect is not an action but a capacity to affect and be affected. It is, then, a capacitating dimension of action. Action is not an all or nothing business, but involves a process of capacitation and a preparedness of the body, a mobilization of bodily potentials.
- An attention to the affective dynamics of power and resistance, then, may make us more sensitive to the role that bodies might play as barometers of the miniscule, moment-to-moment transitions in our capacities. (Hynes, up)

APPENDIX C
Codes and Categories in the Social Science Literature

Category	Code	Discussed in (Directly or Indirectly) in Author(s):
The 'It': The Individual and Aggregate Self Systems	*Selves/Selfhood*	Gammon (2012); Gergen (2009); Holzman (2011); Langdridge, Barker, Reavey, and Stenner (2012); McMullen (1999); Rengifo-Herrera and Branco (2014); Rosa and Gonzalez (2012); Taylor (1989)
The Individual Self System	*Meaning (and existential quests)*	Finn (2012); Heine, Proulx, and Vohs (2006); Korteweg (2001); Perrin, Roos, & Gauchat (2014); Proulx and Inzlicht (2012); Rengifo-Herrera and Branco (2014); Taylor (1989); Wrenn (2014)
The Individual Self System	*Control*	Abraham & Sheeran (2007); Bandura, (2007); Carmody, (2007); Finn (2012); Perrin, Roos, & Gauchat (2014); Rengifo-Herrera and Branco (2014); Stecher, (2015); Sutton (2007b); Wrenn (2014)
The Individual Self System	*Becoming*	Holzman (2011); Newman (2003); Rosa & Gonzalez (2012); Taylor (1989)
The Individual Self System	*Emotions*	Belli, Aceros, & Harré (2015); Hynes (2013); Langdridge, Barker, Reavey, and Stenner (2012); Mascolo (2011); Maturana (2015); Rengifo-Herrera and Branco (2014)
The Aggregate Self System	*Beliefs & Worldviews*	Hedlund de Witt (2012); Perrin, Roos, and Gauchat (2014); Rengifo-Herrera and Branco (2014)
The Aggregate Self System	*Culture*	Eidelson and Eidelson (2003); Hedlund de Witt (2012); Kashima (2014); Marks (2008); McWilliams (2005); Perrin, Roos, and Gauchat (2014); Rosa and Gonzalez (2012); Triandis (1996); Znaneicki (1934)
The Aggregate Self System	*Cultural syndromes*	Eidelson and Eidelson (2003); Hedlund de Witt (2012); Perrin, Roos, and Gauchat (2014); Triandis (1996)
The Aggregate Self System	*Discourses*	Gammon (2012); Hynes (2013); Mint (2010); St. George, Wulff, and Tomm (2015); Tomm, Strong, St. George, and Wulff (2014)
The Aggregate Self System	*Norms (and coalescence)*	Cronen, Pearce, & Harris (1979); Dell (1985); Gammon (2012); Kashima (2014); Korteweg (2001); Rúdólfsdóttir & Morgan (2009); Schwaninger and Groesser (2012); Watzlawick, Weakland, & Fisch (1974/2011); Znaneicki (1934)
The Aggregate Self System	*Standards*	Budd, Clark, & Connell (2011); Choate & Engstrom (2014); Heine, Proulx, and Vohs (2006); Kashima (2014); Rúdólfsdóttir and Morgan (2009); Stearns & Knapp (1993); St. George, Wulff, & Tomm (2015); Triandis (1996); Truscott & Crook (2004); Watzlawick, Weakland, & Fisch (1974/2011); Wittgenstein (1958); Znaneicki (1934)
The Aggregate Self System	*Values (and Morality)*	Gollan and Witte (2014); Harrist and Richardson (2012); Hedlund de Witt (2012); Hynes (2013); Kashima (2014); Mint (2010); Rengifo-Herrera and Branco (2014); Rosa and Gonzalez (2012); Rúdólfsdóttir and Morgan (2009); Schwartz and Colleagues (2012); Taylor (1989); Triandis (1996); Znaneicki

		(1934)
The Process Leading to 'It'	*Affect (and Potentials)*	d'Abbs (2015); Gammon (2012); Hynes (2013); Langdridge, Barker, Reavey, and Stenner (2012); Rengifo-Herrera and Branco (2014)
The Process Leading to 'It'	*Collective cognition*	Bateson, G. (1972); Couzin (2008); Kao, Miller, Torney, Hartnett, & Couzin (2014); Shaw & Couzin (2013); Schwaninger and Groesser (2012)
The Process Leading to 'It'	*Economies of affect*	Bateson (1972); Gammon (2012); Maturana (2015); McWilliams (2005); Stearns & Knapp (1993); Taylor (1989); Wrenn (2014)
The Process Leading to 'It'	*Ethical becoming*	Bøe et al., (2013; 2014); d'Abbs (2015); Holzman (2011); Hynes (2013); Perrin, Roos, and Gauchat, (2014); Rúdólfsdóttir and Morgan (2009)
The Process Leading to 'It'	*Embodiment (and performativity)*	Belli, Aceros, & Harré (2015); Bøe et al., (2013; 2014); Gammon (2012); Holzman (2011); Hynes (2013); Newman (2003); Perrin, Roos, and Gauchat, (2014); Sugarman (2015); Taylor (1989)
The Process Leading to 'It'	*Grounding (and daily practices)*	Kashima (2014); Keel and Forney (2013); McMullen (1999); Proulx and Inzlicht (2012); St. George, Wulff, and Tomm (2015)
The Process Leading to 'It'	*Identity*	Eidelson and Eidelson (2003); Gammon (2012); Gergen (2009); Hynes (2013); Kashima (2014); Mint (2010); Perrin, Roos, and Gauchat (2014); Rosa and Gonzalez (2012); Rúdólfsdóttir and Morgan (2009); Taylor (1989)
The Process Leading to 'It'	*Metaphors*	Bøe and colleagues (2013; 2014); Gergen (2009); Holzman (2011); McMullen (1999)
The Process Leading to 'It'	*Neoliberalism*	Gammon (2012); Lemke (2001); McWilliams (2005); Perrin, Roos, and Gauchat (2014); Prilleltensky and Prilleltensky (2003); Sugarman (2015); Wrenn (2014)
The Process Leading to 'It'	*Ontogeny*	Keel and Forney (2013); Maturana (2015); Rengifo-Herrera and Branco (2014); Rosa and Gonzalez (2012)
The Process Leading to 'It'	*Oppression*	Arthur & Collins (2010); Harrist and Richardson (2012); McDowell, Libal, and Brown (2012); McWilliams (2005); Mint (2010); Holzman (2011); Prilleltensky and Prilleltensky (2003); Sugarman (2015)
The Process Leading to 'It'	*Social justice*	Arthur & Collins (2010); Harrist and Richardson (2012); McDowell, Libal, and Brown (2012); Prilleltensky and Prilleltensky (2003); Sugarman (2015)
The Process Leading to 'It'	*Social pacts (and human rights)*	Marks (2008); Mascolo (2011); McDowell, Libal, and Brown (2012); Nilsson & Townsend (2010); Rosa and Gonzalez (2012)
The Process Leading to 'It'	*Subjectivity*	Finn (2012); Gammon (2012); Langdridge, Barker, Reavey, and Stenner (2012); Lemke (2001); Sugarman (2015); Wrenn (2014)
The Process Leading to 'It'	*Value neutrality*	Harrist and Richardson (2012); Holzman (2011); McDowell, Libal, and Brown (2012); Prilleltensky and Prilleltensky (2003); Sugarman (2015)
The Process Leading to 'It'	*Technologies of power and self*	d'Abbs (2015); De Visser and colleagues (2015); Gammon (2012); Lemke (2001); McWilliams (2005); Mint (2010); Prilleltensky and Prilleltensky (2003); Sugarman (2015); Wrenn (2014); Holzman (2011)

APPENDIX D
Axiological Assumptions and Political Consequences of Paradigms

The following slides are from Tomm & Gosnell's (2015, November 19) power point presentation at the University of Calgary:

THE POSITIVIST PARADIGM

- Ontology: *Realist*
- Epistemology: *Dualist/Objectivist*
- Methodology: *Experimental/manipulative*
- Axiology: *Discover the real 'Truth'*
  - It is 'good' to be completely objective and remain detached in your relationships
  - It is 'bad' to allow any personal values to influence your findings
  - It is 'good' to predict and control
- Politics: *Expert-Instructive*
  - Knowing the objective 'Truth' justifies telling others what to do and imposing what is 'known to be True' upon them (even to the extent of perpetrating violence).
  - The certainty in knowing what 'is' allows for professional judgments, diagnosing, and the labeling of others, e.g. traditional psychiatric practice and most of psychometric/psychological testing

THE POSTPOSITIVIST PARADIGM

- Ontology: *Critical realist*
- Epistemology: *Modified objectivist*
- Methodology: *Modified experimental/manipulative*
- Axiology: *Try to approach the Truth*
  - It is 'good' to be as objective as possible and to acknowledge that we can only approximate the Truth.
  - It is still 'bad' to allow any personal values to influence your findings.
- Politics: *Evidence Based Practice*
  - Expert decision-making is valued and is based on the 'best evidence.'
  - Decisions are grounded in deductive and inductive data, and remain open to revision, e.g. most contemporary psychiatry and psychology practices including 1st order psychotherapies e.g some aspects of CBT

THE CONSTRUCTIVIST PARADIGM

- Ontology: *Relativist*
- Epistemology: *Subjectivist*
- Methodology: *Hermeneutic, dialectic*
- Axiology: *Construct plausible truths*
  - It is 'good' to engage in meaning making by generating personal constructs (intra-psychically) that 'fit' specific situations and that 'work.'
  - It is 'bad' to hang onto and keep using a construct that does not work.
- Politics: *Individualism*
  - Give priority to what goes on intra-psychically and work on identifying problematic private constructs that need challenging or deconstructing e.g some aspects of CBT, DBT, and narrative therapy.
  - The confidence in knowing what 'fits' or 'works' locally allows for valorizing inventiveness and undermining assumptions about 'discoveries,' universal truths, and certainties.

A SOCIAL CONSTRUCTIONIST PARADIGM

- Ontology: *Relativist*
- Epistemology: *Inter-subjectivist*
- Methodology: *Deconstructive/Co-constructive*
- Axiology: *Collaborative Co-construction*
  - It is 'good' to enter into collaborative conversation to "go on together" and to accept multiple realities
  - It is 'bad' to shut down conversation or to silence (or otherwise marginalize) others.
- Politics: *Collectivism*
  - Co-construct something jointly though collective performances that do not marginalize or oppress, e.g. most 2nd order collaborative therapies
  - Accept joint responsibility for the descriptions and narratives we use and what follows from them.

THE BRINGFORTHIST PARADIGM

- Ontology: *Multiple realities*
- Epistemology: *Subject dependent*
- Methodology: *Recursive reflection*
- Axiology: *Enact loving relatedness*
  - It is 'good' to open space for the existence of the other as legitimate in relation to the self.
  - It is 'bad' to remain indifferent about the experiences and condition of the other.
- Politics: *Place objectivity in parenthesis*
  - Adopt a relational attitude of accepting and caring for others as they exist in the present moment, and act always to increase options (including the option to reduce options).
  - Maintain an awareness of, and accept full responsibility for, one's own distinctions and the actions that follow from those distinctions.

Some Reflexive Questions to Facilitate a Greater Awareness of Possibilities

- If money and a lack of opportunities were not an issue, what would you do with your time and energy?
- If you imagine the various options as a hallway with several doors, are any of the doors open?
- Where might you find the keys to the others?
- What could you do to cultivate relationships with those who 'keep the keys' to the various doors?
- If your access is restricted from the hallway, is there another possible method of entry? A fire escape on the outside of the building perhaps?
- Do you have a right to open the doors you want opened?
- What other questions could we ask here to facilitate a greater awareness of the possibilities for collective responsibility and/or the alternatives to collective protest?