

## **Sewing the quilt of fragmented experiences: Dear data project**

Haley Toll, Ph.D. student  
Memorial University of Newfoundland  
*hrmtoll@mun.ca*

### **Abstract**

In this reflexive self-study, I interweave the heuristic analysis of dreams with reflections on research and data collection processes as a first-year PhD student to discover and contemplate my personal ontologies and epistemologies. The dream content was documented in a journal, and then categorized and symbolically presented in a visual mandala format that is inspired by Lupi and Posavec's (2016) *Dear Data* analogue drawing project. The data are then triangulated with journal excerpts, personal paintings, and analyzed within literature and research about the continuity hypothesis of dreaming (Domhoff, 2003; 2011; 2017; Hall & Nordby, 1972; Hall & Van de Castle, 1966). Research processes, such as data collection, visually representing complex information, and collaborative research processes are also discussed to generate larger conclusions about research. This project is a part of a doctoral methodological course assignment.

*Keywords:* Dear data; visual data; artistic research; dreams; continuity hypothesis of dreaming; mandala symbolism.

### **Weaving a Tapestry: Introduction**

Reality is limited by our own cognitive and perceptual processes, influenced by experiences and other factors like gender, age, language, etc. These sociodemographic variables and experiences are the collective threads that interweave and influence our complex experiences. There are multiple ways to understand different levels of composite experiences, with dream analysis being one of them (Aristotle, 350/2009; Domhoff, 2017; Freud, 1900; Jung, 1988; Schredl, 2010). This heuristic study analyzes my dream content as personal data, and represents these data in visual symbolic diagrams (Moustakas, 1990). The data are triangulated with documented dream content, paintings I have created in the past as artefacts, and psychology theories to contextualize the data (Finlay, 2003). The intention of the research is to reflect on my conscious and subconscious research process, ontologies, and epistemologies. In addition, I analyzed how these fragments of data and my process of stitching them together reflect my identity as an emerging researcher in my first year of doctoral studies. The paper begins with my study design and presentation of findings, and with self-reflective content interlaced within. The findings and discussion section presents a more in-depth analysis of my choices.

### **My Underlying Threads: Epistemologies and Ontologies**

As a psychotherapist, artist, and researcher, I believe that latent subconscious content can reveal a great deal about our underlying experiences that we may not be aware of in the moment, similar to the arts-based and aesthetic intersubjective paradigms (Leavy, 2017a; 2017b). These subconscious thoughts and emotions can be helpful to know ourselves better and more deeply. This is why I first became an art therapist: I found that my underlying emotions and thinking patterns revealed themselves when I was creative and made art. I was able to process information through the act of creation. It became a useful tool for me to observe myself and my own epistemologies.

I think that knowledge about our internal and external experiences are screened through our unique perceptual lens to create layers of truth. For example, thinking in one language can limit our perceptions, because the English language is structured based on Western sociocultural history and ontologies (Bloom, 2014). Thus, different languages organize how we experience our internal and external worlds, while these experiences in-turn shape language (Alim, Rickford & Ball, 2016; Doyle & Lindquist, 2018; Levinson & Wilkins, 2006). Our brain processes a limited amount of our actual sensory experience consciously, as it would be too overwhelming to perceive all the sensations that our body is experiencing in one single moment (Mather, 2016). Thus, a lot of perceptual information is still informing our experiences subconsciously, without our conscious awareness.

### **Seeking Meaning and Larger Perspectives**

*When overwhelmed, I feel thoughtless, and need to focus on how to direct my thoughts towards what is most valuable. I need to focus my energy. I need to know what I value to persevere.*  
(Reflections from personal journal, January 16, 2018)

When I am preoccupied with upcoming assignments my mind is not focusing on the various other experiences occurring around me. It takes time to reflect on more subtle experiences that have affected us without our awareness, and also provide time to think about out more meta-experiences of life purpose and long-term goals.

When I was presented with the project of documenting and interpreting data in my lived experience, I was interested in analyzing my dreams because I wanted to focus on an event that is helpful in my life. Similar to arts-based research paradigms, I wanted the research purpose to focus on meaning-making (Leavy, 2017a). I had made the decision to record my dreams because I wanted to understand how I process my life while I am working through the transition of moving from the developing city of Ulaanbaatar, Mongolia and transitioning to St. John's, Newfoundland. In addition, I was balancing reintegration into the academic system from the work sector, balancing completing academic assignment with my family responsibilities, and also remain acutely conscious of my financial constraints as a student.

I have lived in seven different cities within the past 5 years, including: Gaborone, Montreal, Ottawa, Squamish, Edmonton, Ulaanbaatar, and now St. John's. Relocating to diverse environments has helped me gain deeper wisdom of different lived experiences and adapt quickly to new environments, ways of thinking, and situations. Nevertheless, these transitions have occurred so quickly along with other commitments. I have yet the luxury to process these many lived experiences and social connections. They feel like separate lives, held together by the string of my continued presence and sense of self. I hoped that analyzing my dream content would create a space for myself to reflect on my experiences and contribute to gaining knowledge on how I process my lived experiences. I wanted to analyze my perceptual lens of how my experiences reside within my biased reality. The lens in which the dream content is analyzed is from the perspective of the continuity hypothesis: the notion that our waking life is connected in some capacity to our dream content (Domhoff, 2017; Erdelyi, 2017). In addition to analyzing my research processes, the data of the research proposes to answer the following question: What content of my waking experience is reflected in my dreams?

### **The Dreamscape**

As scientific understanding has grown, so our world has become dehumanized. Man feels himself isolated in the cosmos, because he is no longer involved in nature and has lost his emotional "unconscious identity" with natural phenomena...This enormous loss is compensated for by the symbols of our dreams. They bring up our original nature its instincts and peculiar thinking. Unfortunately, however, they express their contents in the language of nature, which is strange and incomprehensible to us. (Jung, 1988, p. 95).

A singular definition of a dream is challenging due to the broad spectrum of fields holding various perspectives (Pagel et al., 2001; Windt, 2015). It can be perceived as both "a non-conscious electrophysiologic state" (Pagel et al., 2001, p. 195) that occurs during rapid eye movement (REM) and nonREM sleep (Solm, 2000). It is also a "mental experience [that occurs during sleep] that can be described during waking consciousness" (Pagel et al., 2001, p. 195). The various axes to describe and study dreams include: wake/sleep, recall, and content.

Numerous theories attempt to explain the reasons why people dream. These theories are contested between cognitive psychology, sociology, neurobiology, and philosophy experts (among others), although many agree that it has some relationship with consolidating learning, information, and motivation (Domhoff, 2011; Hobson, 2002; Llewellyn, 2013; Schredl, 2010; Siegel, 2001; Solms, 2000; Windt, 2015). For example, Llewellyn (2013) postulates that REM during sleep is "elaborative encoding for episodic memories" (p. 589). Episodic memory describes the memory of autobiographical events and lived experiences, such as places, times, people, associated memories, etc. Coined by Tulving (1984; Tulving & Markowitsch, 1998), episodic memory informs the distinction between "knowing," which is semantic and more factual, and "remembering," which is episodic and describes felt emotions about events that occurred in the past. Thus, this is also in line with the *continuity hypothesis* of dreams (Hall & Nordby, 1972).

### **Continuity Hypotheses of Dreaming**

The continuity hypothesis first began when Lucien Freud (1900; 1953) proposed that dreams are an extension of waking life in his seminal novel, *The Interpretation of Drea*. Decades later, Calvin Hall and A. Bell named this concept "the continuity hypothesis" (Hall & Nordby, 1972; Hall & Van de Castle, 1966). Many empirical studies support the continuity hypothesis, meaning that elements in one's lived experience and waking concerns occur in one's dreams (Cartwright Mehmet, Kirkby, & Friedman, 2006). For example, large events such as divorce have been found to affect sleep content (Cartwright & Lamberg, 1992; Cartwright et al., 2006; Domhoff, 1996; Proksch & Schredl, 1999; Strauch & Meier, 1996; Schredl, 1999).

People diagnosed with emotional and psychological disorders may also experience dreams differently (Wulff, Gatti, Wettstein, & Foster, 2010; Zanasi, Calisti, Di Lorenzo, Valerio, & Siracusano, 2011). Cartwright et al. (2006) studied 20 depressed and 10 control participants who were undergoing divorce and found that the degree of waking concern about their ex-spouse was significantly correlated with the amount of dreams including their ex-spouse. In addition, dreams of participants currently experiencing a depressive episode had less affect and less linkages among associated memory material than participants in remission. Schredl and Hofmann (2003) studied the different aspects of the continuity hypothesis and found no correlation between waking activities and corresponding dream content, supporting the discontinuity hypothesis of dreams. Consequently, this hypothesis continues to be contested, and researchers question whether to include other influencing factors and which variables to include (Erdelyi, 2017).

Domhoff (2003; 2011; 2017) believes that preoccupations and concerns in waking life are the defining features that influenced dream content in the continuity hypothesis. Similarly, emotional involvement of life events into dreams are an important factor. For example, Hartmann (2000) found that that cognitive processes, such as reading, writing, and arithmetic, are often not recalled when participants reported on their dreams. Neurological studies found that areas related to motivation and goals are related to the ability to dream, such as the mesolimbic and mesocortical dopaminergic neurological pathways and temporal lobe. For example, damage in these areas resulted in loss in both dreaming ability and motivational behaviour for participants (Solms, 2000). This has implications for the meaningfulness of the subjective dream content. Malinowski & Hortin (2014) found support for this notion when they discovered that significant emotional waking-life events were remembered more than stressful events or regular daily activities. In particular, personally significant, novel, or concerning waking experiences were apparent in dreams recalled, as opposed to other daily activities. Theories about the purpose of dreams and how the content reflects our lived experience are still contested, but empirical research provides some notions of the relationship between our waking life and dream content.

### **Crafting the Quilt: Methodology**

Similar to phenomenologists, I am “interested in human consciousness as a way to understand social reality, particularly how one ‘thinks’ about experience; in other words, how consciousness is experienced” (Hesse-Biber & Leavy, 2011, p. 19). This research is fundamentally heuristic because it uses the process of gaining in-depth self-awareness to study a topic, as opposed to using external stimuli as data (Moustakas, 1990). The meaning of the Greek word heuristic is closely related to the term *eureka*: to discover and uncover (Kapitan, 2010). Nonetheless, I placed my research within this methodological qualitative paradigm in retrospect and I also used some grounded theory approaches and phenomenological perspectives. I was more curious about my natural inclinations to collecting, synthesizing, and analyzing data. I did not have a standardized research process in mind before researching because I was curious about my natural inclinations.

During the months of November to December 2017, I chose to record my dreams in a journal format to gain deeper insight into my subconscious processing of events (Erdelyi, 2017). I chose to document my dreams for two weeks while in Newfoundland (November 6-22, 2017). Lastly, I decided to record a dream journal once I had arrived in Ottawa to spend time with family (December 13-19, 2017) during the holidays. All of the recordings are entered in an informal written journal format. The data in the journal are recorded as remembered and do not include any interpretative content. Similar to grounded theory processes, I used the first data collection process in my Dream Journal Phase 1 to gain insights on my research on upcoming data collection subjects and processes (Charmaz, 2008; Leavy, 2017b). Accordingly, the experience of collecting my dreams in the first phase informed my next round of data collection, where I recorded more detailed information, such as how I woke up from my dream (alarm or naturally). The codes, categorizations, and understandings represented in the visual diagrams were generated directly from the found data. However, the codes and categorizations were unique to each diagram, which represented different elements of my experiences.

Dream journals were the most prevalent types of data collection process in numerous contemporary dream content/recollection studies (Cartwright et al., 2006). The data collected in my journal were occasionally illegible, and I occasionally recorded my dreams in the “notes” section of my phone when my journal was not present. Consequently, the second step in my data collection process was organizing the content.

**Coding and categorization of data.** The content was organized in a table format to allow for coding of the dream diary narratives. The content was organized by day, narrative, and categories to code the narratives. Examples of categories include: 1. emotional content deemed prevalent, 2. recorded account of the dream content, 3. amount of people in my dream, 4. context (situations in my life that are similar to my dream themes), etc.

Leavy describes coding as “a process of analysis that allows for the classification and reduction of the general data...[by] assigning a word or phrase to segments of data” that captures the data’s essence (2017, p. 256; Saldaña, 2009). I chose the prevalent emotions and the most salient features from my dream experience to include in each category. The data in the columns were then grouped into similar categories to be depicted in the visual diagrams in a process called *categorization* (Saldaña, 2014). In the visual diagrams, the categories were divided and given specific visual descriptors that included patterns, colours, and shapes.

**Analysis.** Data are analyzed by comparing the visual diagrams with my lived experiences, excerpts from the dream journal, personal art artefacts, and contemporary psychology research in the field of dreams (Domhoff, 2017; Schredl, 2009; 2010).

### **Validity and Resonance**

In this study, the concept of validity itself is perceived as a tool, as opposed to “a reflection of the truth” (Koro-Ljungberg, 2008, p. 983). This is particularly relevant for a self-study related to my self-reports on experiences of dreams. To increase validity in this qualitative study, the study triangulates: 1. reflexive observations from the researcher about the research process, 2. data from the dream journal, 3. excerpts from my dream journal, and 4. previous paintings and images as life artifacts. The findings were embedded into relevant theoretical frameworks within the respective fields of dreams (Finlay, 2003).

In addition, authenticity, truthfulness, believability, and aesthetic factors are significant factors to evaluate the data and research process that integrates creative arts and subjective emotional experiences. This study attempts to portray my authentic dream content and documents personally vulnerable data, such as sexuality as a prevalent thematic category, which increases its trustworthiness through transparency (Leavy, 2017a; 2017b). In addition, the aesthetic choices to portray data can increase the artistic quality and resonance with the audience (Barone & Eisner, 2012).

### **Participants**

This study involves myself, the researcher as the sole participant, making this analysis a self-study, with the intention to propose larger implications based on my reflections. Consequently, this research is limited to my demographic variables, such as being a woman who is 29 years old, born in Canada, and is engaging in her first year of doctoral studies. I am not a blank vessel of unbiased information, and I am aware of my own subjective experiences as I conduct the study. Therefore, the findings cannot be generalized beyond my experiences and their link to empirical studies to provide context. All revealing content of other people in my life have been removed to ensure that the study is a self-analysis.

## **Presentation of Findings: Mandala Symbolism to Present Dream Content**

The symbolism in the presentation of findings is personally meaningful and relevant to the metaphysical nature of the data collected. To represent the depth and universal experience of dreams, mandala art was carefully chosen. Mandalas are symmetrical circular sacred designs that embody humanity's relationship to the universe and often represent a complex theoretical system of spiritual order (Mandala; Hutchinson Unabridged Encyclopedia with Atlas and Weather Guide, 2016). They are most often seen in Buddhist and Hindu art, and meditation rituals. Tibetan Buddhist monks integrate meditation with the thoughtful creation of intricate mandalas from coloured sand. The natural elements, such as wind, sweep away the beautiful image, representing the impermanent nature of material life (Bryant et al., 1992; Sahney, 2006). In Jungian depth psychology, the mandala form is an archetype that represents "psychic wholeness," balance, subconscious (with can emerge while dreaming) (Davis, 2016, p. 242.)

When I was living in Mongolia, the Zanabazar Museum of Fine Arts displayed ancient traditional Mongolian Tibetan Buddhist and shaman art. In the dark museum, I was struck by this large and intricate mandala quilt, made of delicate silk patterns and gemstones, shown in Figure 1. This creation took my breath away and I took a photo to remember this piece. In line with this art, I created mandalas loosely inspired by my memory of this image below.



*Figure 1.* Mandala quilt created from silk and golden fabrics and gemstones in the Zanabazar Museum, Ulaanbaatar, Mongolia

I chose mandalas because their symbolism reflects my ideas of dreams: as representations of larger life events and with their ephemeral nature (Helicon, 2016). Similar to the sand mandalas created by Tibetan monks, dreams are intangible and recollections easily slip away the next morning. Mandalas have been linked to wellness and relaxation in various studies (Curry & Kasser, 2005; Henderson & Rosen, 2007, Potash, Chen, & Tsang, 2016). I have often included mandalas in my art therapy work, and linked the symbolism of each mandala ring to meaningful self-reflective and resilience-building concepts, such as supportive elements in one's life. The first two weeks of dream content in St. John's (Figure 2) reminded me of mandala tiles, while the second part of my dream charting in Ottawa (Figure 4) portrayed a more complex mandala, reminiscent of the quilt in the Zanabazar museum.

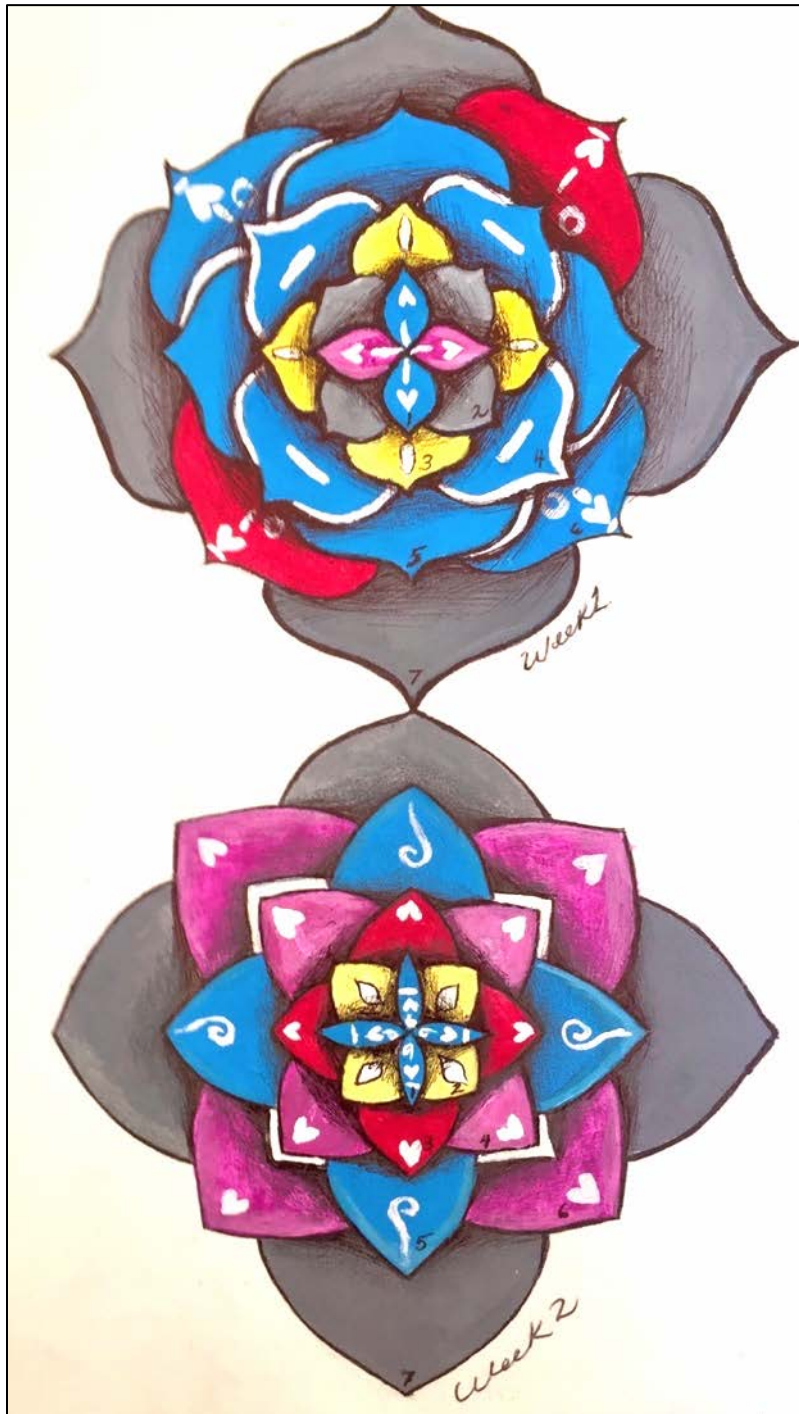


Figure 2. Mandala diagrams representing dream content that occurred each night from November 6-12 (Top) and November 15-22 (Bottom), 2017.

## Legend for dream mandalas in St. John's, NL

I recorded my dreams and coded the data based on prevalent emotions and people present in my dreams from November 6-12 2017 (week 1, Top Mandala) and November 15-22 2017 (week 2, Bottom Mandala). Based on my Dream Chart in Table 1, I created the categories below and integrated them into the two mandalas that represent the two separate weeks.

### How to read it:

- The week days begin from the center (day 1) towards the outside (day 7), while each petal layer is one night. The layers are separated by the shadows.
- Each week is one flower.












Legend of emotions prevalent in dreams represented by colour in the mandalas		Legend of types of people in my dream represented by symbols in the mandalas	
	Worry/insecurity		My partner
	Sexual		New friend(s)
	Anger/annoyance		Old friend(s)
	Fun/exciting/empowering content		Friend(s) abroad
	Forgot dream content		Stranger(s)
			Babies

Figure 3. Legend that explains how to read the dream content in Figure 2.





Figure 4. Graphic image represented elements from my dreams from December 13-19, 2017.

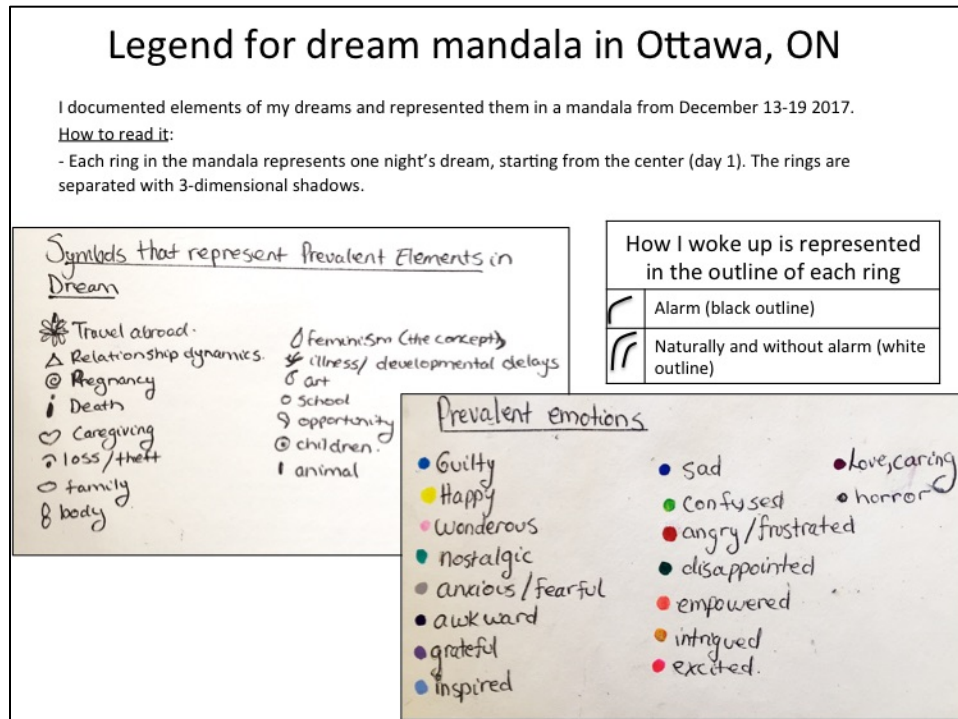


Figure 5. Legend for the dream mandala recorded in Ottawa, Ontario from December 13-19, 2017.

### Patterns: Interpretation of the Data

#### The Overall Composition

The following data analysis compares the findings with modern dream research (Windt, 2015). It does not include dream psychoanalytic archetypes or popular culture dream dictionary symbols after initially investigating the research (Davis, 2016; Freud, 1919; 1953). Although contemporary empirical quantitative dream analysis exists, such as Domhoff's (2013) research using the Hall/Van Castle system (1966), I decided to analyze the data in a holistic manner. The data are compared to theories exploring the continuity hypothesis of dreaming (Domhoff, 2017) that include: dream recollection (Schredl, 2003; 2008; 2009), suppressed thoughts appearing in dreams (Cavalotti et al., 2016; Kröner-Borowik et al., 2013), and the function of uncanny content in dreams (Llewellyn, 2013).

**Dream recollections.** There is a salient difference in complexity and detail between the last mandala (Figure 4) and the first two mandalas (Figure 2). I found that I was better able to remember longer and vivid narratives when in Ottawa, where I was with family and friends during the holidays. I forgot my dreams more often in St. John's.

Various authors have written about factors that influence dream recall frequency, detail, and long-term dream memory. Factors include "gender, attitude towards dreams, imagination, frequency of nocturnal awakenings, attitude towards creativity, absorption, openness to experience" (Schredl, 2009, p. 354). Neuroticism was related to frequency and details of the dreams, and the participants' attitudes towards creativity and their quality of visual memory were connected to better dream content recall in the morning. Nonetheless, Schredl et al.'s (2003) large-scale study of 444 participants found that personality, sleep variables, creativity, and attitude towards dreams explain a mere small amount (8.5%) of

interindividual variance in dream recall frequency at home. In addition, sociodemographic variables (such as gender, age, income, and education) did not have a strong correlation with dream recall frequency (Schredl, 2008).

I find that the change in environment and factors affecting my sleep in Ottawa and St. John's could account for the ability to recall content and the detail of the remembrances. In Ottawa I often woke up more naturally and was able to remember specifics. I found that if I woke up by an alarm I was startled, and my dreams tended to be more worrisome. Thus, my startled sensation made me forget the dream occurring a moment before.

My dreams in Ottawa had increased diverse and complex emotions involved, as seen in Figure 4 compared to Figure 2. In St. John's, the emotions documented were limited to 5 major categories, while I was able to create 17 categories in Ottawa. I wonder if this relates to the variable of "openness" and "absorption" in my dreams (Schredl, 2009), as I was not concerned or feeling stressed with assignments or deadlines in Ottawa. In addition, the first two weeks could have helped me build skills to effectively remember and record more detailed dream content. I may have improved my dream recollecting merely through practice. Lastly, I had engaged in a gratitude journal in-between documenting my sleep content. I wonder if this intervention had an effect on my dream content and recollection. However, these factors remain inconclusive and I imagine that a more structured study, isolating and measuring particular factors affecting this change, better illuminate potential causal factors.

#### **Research Question: What content of my waking experience is reflected in my dreams?**

I wanted to forget the past, but it refused to forget me; It waited for sleep, then cornered me.  
(Margaret Atwood in *Lady Oracle*, 1976, p. 239)

**Suppressed thoughts in dreams.** In St. John's and in Ottawa, many themes in my dreams related to betrayal by loved ones, being stolen from, seeing a child's skeleton, a snake killing a family, mediating a friend's potential romantic feelings, having a dirty home, losing a wallet, etc. My prevalent emotions in dreams included more worry and sexuality in St. John's than Ottawa. I dreamed of events or fears that I preferred not to think about in my waking life. These fears are sometimes useful, for example, ensuring that I never leave my belongings in spaces where they could be stolen.

*When I returned to the main entrance of the building, my purse was spread out and the contents were all displayed. My wallet was empty... I was anxious and scared about how to call about the theft and cancel my credit cards. (Author's dream diary, December 17, 2017)*

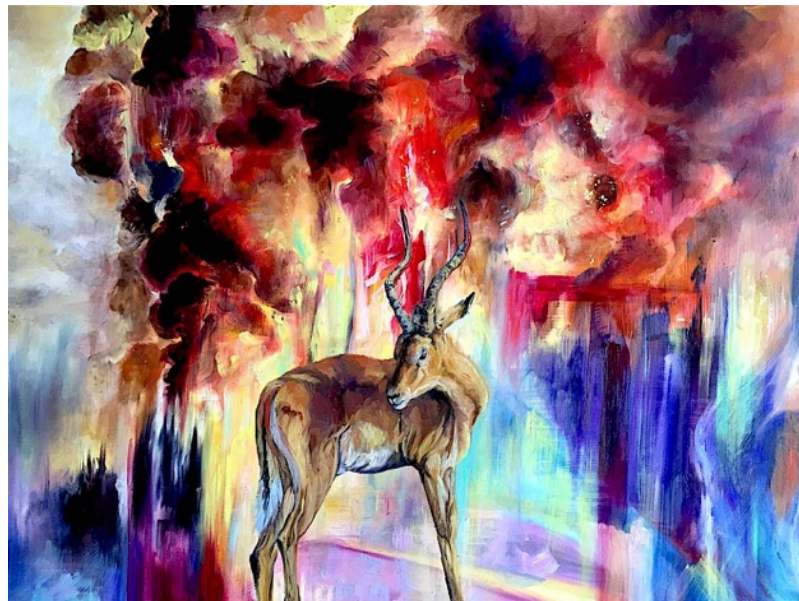
Yet, some daily fears are not helpful in my daily life, and I suppress them. Suppressed and unwanted thoughts have been connected to influencing dream content in healthy participants (Cavalotti et al., 2016). For example, Kröner-Borowik et al. (2013) invited 15 deemed-healthy adults to actively suppress unwanted thoughts five minutes before they fell asleep, and compared the dream content to a control group who were told not to mentally suppress content. Independent raters found that participants who suppressed unwanted thoughts had more dreams about the targeted suppressed (and distressing) content. Thus, this study has implications about how suppressed thoughts influence dream content and distress.

When I look at the analysis and chart depicting my dreams, I can make connections between my waking events and emotions. This is in-line with the continuity hypothesis of dreams (Domhoff, 2017). For

example, disturbing events about a murder in a film I saw the day before occurred in my dream. These events may seem mundane, but may carry deeper feelings that require processing and contain salient meaningful themes. As I was documenting my dream I was struck by how many events in my dreams paralleled events or concerns that I had in my waking life.

*I began questioning whether I was ready to have a baby because my partner was working from afar and I was in school. (Author's dream diary, December 15, 2017)*

Some of the most salient emotional experiences appear in my dreams, such as my ambivalence about giving birth and having a child, or processing an empowering pageant event I attended with HIV positive women in Botswana five years ago. Children whom I had met and worked with many years ago also appeared in my dream (Malinowski & Horton, 2014). Thus, preoccupations and content in my dreams did not necessarily relate to immediate experiences, but were recollections of long term memories. Some of these memories were meaningful in my life, and perhaps connected to motivation and goals (Solms, 2000). For the past couple of years, I created paintings that superimposed memories and places together, as seen in Figure 6 and Figure 7. These paintings seem to parallel my dream content, and thus also likely parallel my preoccupations.



*Figure 6. Oil on canvas painting reflecting memories from Botswana and the Fort McMurray fire when living in Edmonton (Toll, H., 2016).*





Figure 7. Unfinished oil on canvas painting reflecting memories from Mongolia (Toll, H., 2018).

### **The function of uncanny content in dreams.**

*A family with two little boys (latency age) had a pet snake and a dog. Someone in their home had died. No one knew who the murderer was and it ended up being the pet snake. (Author's dream diary, December 19, 2017)*

*When I was between sleep and wake, I thought that the phrase: "babies holding little balls of tummy" was clever. I think that it was about animal babies, but I cannot recall. (Author's dream diary, November 16, 2017)*

The emotional heaviness and uncanny narratives can be explained through Llewellyn's (2013) theory of memory retention and processing through dreams. Llewellyn believes that the elaborative encoding of episodic memories during REM can be understood through the *ancient art of memory* (AAOM) principles, being: bizarre association, visualization, organization, narration, embodiment, and location. The named principles help people neurologically recall memories because salient associations are stored in the long-term memory centers of our brain (the limbic system including the hippocampus and cortex) (Schacter, Gilbert, & Wegner, 2011). This model can predict how memory is stored in the brain while dreaming, and can account for the emotionally dense and sometimes absurd content. Embodiment was also prevalent in my dreams about pregnancy.

### **Reflections on the Crafting Process: Discussion**

Metaphors can appear as guides to suddenly offer a solution to previous concerns, through an epiphany. When writing about the reasons behind my research choices I realized that the metaphor of a quilt, apparent in the inspiration image in Figure 1, encapsulates my experience as a researcher and integration into St. John's. Throughout my first year of studies, I felt uncomfortable with my past rich experiences feeling erased and only a small fragment of my identity as a new academic being seen in my new environment. It was as if I could not carry my past experiences forward into my studies, and I should be a blank slate as a new student. The quilt metaphor informs my research perspectives because I am much

more interested in a constellation of wider experiences and implications (past, present, and future) than smaller details apparent at face-value. I am interested in the whole person that is carried forward through abundant life experiences. As I am sewing my quilt, I must simultaneously not miss a stitch and maintain perspective about the ultimate vision of the piece through its composition, colour-balance, patterns, and design.

I noticed that my choices in methodologies and visual forms are often based on Eastern philosophical and spiritual perspectives, which surprised me. In Mongolia, I was immersed in trying to understand Buddhist perspectives, and have often practiced Vipassana meditation on silent retreats. I did not realize how much these ontologies and epistemologies echoed in my embracing non-singular truths. This ontology parallels a phenomenological focus on *how* reality is understood and experienced (Hesse-Biber & Leavy, 2011). The mandala symbolism and dream studies also reflect current mindfulness movements in psychology and counselling, which can be interlinked with my past psychotherapy training.

### **Reflections on Preliminary Research**

I did not do preliminary research about a chosen methodology before I began the process because I was curious about how my natural research inclinations would fit into broader methodologies. I found that my research fits (but not perfectly) into a heuristic inquiry and has grounded theory components, by previous data collection informing subsequent data collection (Charmaz, 2008; Moustakas, 1990). It also shares the phenomenologist focus on studying how humans experience lived events, and contains arts-based aspects through integrating my artwork into the analysis (Leavy, 2017b).

I dove into researching data with a general knowledge of the subject from my professional experience as an art therapist who occasionally uses dream content to inform underlying emotions and thoughts to achieve clarity in therapy. I did not have prior knowledge about most of the contemporary empirical research in this field. When I began documenting my dreams I was unsure if I wanted to continue with this topic. At first, I was interested in exploring my felt experiences of competence and incompetence while beginning in PhD program, but the exploration became too depressing. I realized how this study would be emotional and psychologically unhelpful because I was analyzing how I believed I was appraised by others. Hence, I was also ambivalent about the topic and I was non-committal. I floated between studying dreams and gratitude in-between, finally choosing dreams as the final focus for publication.

Once I completed the data collection, I conducted online research about dreams, which I enjoyed immensely. The literature highlighted ways that I could have documented and analyzed my findings, such as the Hall/Van Castle system to analyze dream content (1966; Domhoff, 2013). I could have analyzed the work by directly correlating my dream content with waking events, following the work of Schredl (1999; 2007; 2008; 2009; 2010) and Domhoff (2003; 2011; 2013; 2017). If I were to have done more preliminary research before, I may have chosen to explore quantitative methods.

### **Gathering the Material in my Data Collection Process**

The data collection process during this study was more open and personally experimental than other studies that I have conducted in the past. It took on a grounded theory approach and the intention was to experiment with the research process itself (Charmaz, 2008). I took the opportunity to experiment with making mistakes and trying new ways to gather data throughout the process. This openness enables me to reflect on my preferences, choices regarding interpreting and presenting data, and ingrained habits. I found that my research had a social constructivist and arts-based theoretical orientation because it

followed an open, unfolding, and intuitive process to research that is informed by subjectivity (Denicolo, Long, & Bradley-Cole, 2016; Leavy, 2017a; 2017b).

Collecting dream content was difficult because I needed to consciously remember my dreams as soon as I woke, or else I would forget. If I awakened in the middle of the night I would record my dreams as soon as possible. This meant turning on my bedside lamp and writing at 2 am or 3 am. Otherwise, there was the possibility that I could not remember the next morning. Forgetting my dreams in the morning had occurred during the first few weeks of dream recordings. This vigilance of recording my dreams also influenced my sleep patterns, where I did not allow myself to drift back to sleep easily after waking up in the middle of the night because of the need to record data. I had never noticed before that I woke up in the middle of the night. If I did not have my journal present I used my phone to record my dreams as quickly as possible. This contributed to a lack of deep sleep while gathering the data.

### **Ambivalence about Presenting Complex Visual Information**

As an artist who completed a Bachelors of Fine Arts I am aware of my limitations in communicating complex information in visual forms. I do not have graphic design training, but know techniques from studio arts trainings. Nevertheless, all images tell symbolic stories to various extents. Yet, the concept of images representing concrete data with a legend made me apprehensive. I reflected on my brief graphic arts course in high school and began to create sketches of potential diagrams to communicate visual information in a simple manner. In addition, I also kept the categorized data in simple, general groups and limited the retrieved data to people, prevalent elements, and emotional content. I limited the dream data represented in the diagrams, and chose not to publish the charts to protect my personal privacy and boundaries.

The progression from simple to complex mandala images can represent my increased comfort and ability to communicate complicated information in a structured visual piece. I believe that Figure 4 achieves my pursuit in creating a visually engaging and informative image. A friend provided feedback on not being able to fully distinguish the rings representing each night. I added shadows to create the illusion of depth between each ring to separate the nights.

Lastly, the choice to include my own reflective paintings in the analysis was a decision made much later in the writing process when I was analyzing the data. The paintings exemplify my lived experiences over the past couple of years, and reflect how my dream content reflect my life beyond the data collected. It shows that the data do not operate in a vacuum, but magnify a moment in time in my fluid and progressing life.

### **Stitching Together Ideas: The Collaborative Research Process**

One of the requirements in this project was to pair with a cohort partner, in order to support one another in during the research process. My partner and I focused on providing feedback to one another throughout the data collection process by discussing our experiences, concerns, and ideas about visually communicating the data through images. My research collaborator is a very proactive student and also an artist. This collaboration and mutual support helped motivate me to stay on-task during the winter holidays. Our relationship can be characterized as being very optimistic and encouraging towards one another, which is helpful. We portrayed only the optimistic lens and helped one another by sharing ideas.

This collaborative relationship inspired me to seek out support from other peers in my PhD program and friends around me. During the process of writing up my research another cohort and I discussed reviewing one another's work to provide feedback, stemming from organic conversations about motivation. I created a shortened and stringent timeline to complete our first drafts to increase motivation. The feedback about one another's work was enlightening and helpful, because we have different academic backgrounds and opposite strengths. For example, my peer's writing style often begins with a strong narrative voice, whereas I begin research papers by piecing together a breadth of research.

This form of collaboration was novel because we were both working on separate projects, as opposed to integrating our ideas into a single project. Before my studies, I had worked in research teams where our collaborative roles were carefully defined to synergize our efforts towards a goal. I appreciate the collaborative and supportive relationships created in this project because my ideas do need a sounding board to gain confidence and clarity. Loneliness among doctoral students at different periods during their studies can have a large impact on their mental, emotional and physical health, as well completion rates (Janta, Lugosi & Brown, 2014; Ali & Kohun, 2007). I will consciously seek out collaborative peer support in future projects.

### **Wrapping Myself in the Quilt: Conclusion**

As a human being, I interweave multiple existences across different environments, as a therapist, artist, student, academic, sister, child, romantic partner, friend, and woman. I am a symbolic quilt of the fragmented dream cosmos (Figure 2 & Figure 4). My challenge as a researcher is to compartmentalize my identity as a researcher from my humanity, as a sometimes fallible anxious, worrisome, and sexual being. I am challenged to disengage my personal self from my inevitable professional boundaries and identity. In addition, I am challenged to simultaneously represent meta-experiences of truths by observing micro details, when coding and categorizing data.

The research study's overall purpose was to observe my perceptions and processes as a researcher. This researching, recording, analyzing, and introspective writing process reached its overall goal and led to self-discovery. During the study, I had collected data on dream content. I analyzed these data by integrating personal reflections, personal paintings, quotes from my dream journal, and psychology theories (Domhoff, 2017; Schredl, 2017). Through encountering data about my life with an intention to remain open, I learned about my underlying assumptions, ontologies, and epistemologies seen within the fabric of my metaphorical mandalas and perspectivist methodological choices. These concepts were undercurrents that drove how I looked at data and what types of knowledge I valued. I began to understand the importance of seeking out collaborators to support one another in independent projects. The tapestry interweaving scraps of words, symbolic images, tables, and references is complete, sewn together within an *American Psychological Association* (APA, 2010) format, as the pattern.

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