

LOOK AT ME NOW, MOM!
**MIRRORING AT THE INTERSECTION OF NEUROSCIENCE, DRAMA THERAPY,
AND ADULT ATTACHMENT**

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ABSTRACT*LOOK AT ME NOW, MOM!*MIRRORING AT THE INTERSECTION OF NEUROSCIENCE, DRAMA THERAPY, AND
ADULT ATTACHMENT

ROBIN LUCKWALDT

This theoretical research examines the benefits of drama therapeutic mirroring as an attachment-oriented therapy for adults and addresses the need for further research into the development of adult-oriented interventions involving the mirror game. This need for further research is stated as an expression of the limited work available on embodied attachment therapies for adults, particularly in comparison to the robust body of research that has been conducted in the context of earlier developmental stages. A review of the literature includes information on mirroring at the intersection of neuroscience and the creative arts therapies as well as an overview of the relationship between attachment and identity formation over the course of development, and tracks the strong bases in theory and praxis that support drama therapeutic mirroring as an attachment therapy across the lifespan. The work concludes with proposals for future areas of research, with particular foci on: how the intervention of the mirror game might be applied more widely and intentionally to support attachment outcomes in various adult relationships; and how the composition of adult sexual identity and attachment might inform the formulation of future adult attachment therapies across modalities.

Keywords: attachment, identity, adult, mirroring, mirror game, drama therapy, sexuality.

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Chapter 1: Introduction; *Specular Reflection*. (Including the aim of this research and guidelines to contextualize this work for the reader.)

Alone has to do with becoming
 bodyless
 it isn't possible
 anyway mirrorless
 the reason I can't think in coffee shops
 those public places
 that aren't publics
 which are everywhere.
 It has to do with bathing
 in an eyeless air
 until an argument, me-shaped
 rests its elbow on a surface
 like my thigh.

- River Halen (2022), excerpt from *ALL THE PARTS, MOVING* (p. 45).

With this research, I hope to examine whether there is a basis in the literature indicating that drama therapeutic mirroring could be effective in attachment therapies for adults. Like River Halen's (2022) offering, above, this work is grounded in the understanding that our embodied relationships with those around us form crucial elements of our selfhood (Siegel, 2012; Winnicott, 1957, 1965, 2016). This core aspect of my research investigates the process of identity formation in conjunction with attachment formation at various stages of development. I will explore the ways in which drama therapy has been found to influence and understand attachment and identity work, with a focus on the drama therapeutic interventions called *mirroring* and *the mirror game*, as well as the understanding of mirroring as a human behaviour and neuronal process. Please note that, although the mirror game intervention involves both the human function of mirroring and the intervention of mirroring, the terms will not be used interchangeably and I will clarify the type of mirroring I intend to relay where it is necessary to.

Throughout the literature review I will acknowledge the basis of drama therapy and mirroring in attachment work with infants, children, and adolescents as a precursor to examining their use as attachment therapies in adult stages of development. The review moves through the lifespan chronologically and pairs each developmental era with an examination of therapies that incorporate mirroring or the mirror game in developmentally congruous ways. Trends in the literature concentrate on attachment and identity formation in childhood nurturance relationships, then shift to translating these principles to adolescents in the process of individuation and then to adults in social and sexual relationships. In the sections regarding the developmentally

appropriate applications of mirroring in therapy, I will reference attachment literature to support the drama therapeutic theories, paradigms, assessments, and interventions described.

Furthermore, I will draw on the fields of dance/movement therapy, art therapy, play therapy, and psychotherapy since the parallels between these modalities and drama therapy lend meaning to one another. The selected works of literature have these primary concepts in common: the processes of attachment and identity formation are integrated; in their essence attachment and identity are embodied experiences; the creative arts therapies are suited to attachment and identity work as sensory and embodied methodologies; and mirroring/mimicry are often inherently or explicitly present in creative arts attachment therapies (Berrol, 2006; Brassard, 2008; Broucek, 1991; DeYoung, 2015; Erfer & Ziv, 2006; Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022; Flickinger, 2019; Jennings, 2011; Jones, 2007; Johnson, 2009; Miller & Torkington, 2021; Lewis, 1988; Moore, 2006; Orange, 1995; Park, 2019; Schore, 2009; Siegel, 2012; Tronick et al., 1978; Versaci, 2016; Weber & Haen, 2016; Winnicott, 1957, 1965, 2016). Embodiment as a core aspect of the arts therapies does not only furnish them as a vehicle for attachment healing in a conceptual way. Rather, the embodied processes of the arts therapies provide direct access to the neurological mechanisms of the human body and brain, offering tangible and literal engagement with the mechanisms of attachment and identity formation (Bleuer & Harnden, 2018; Miller, 2021).

Definitions

The following terms: *mirroring* and *the mirror game*, are operationalized to ensure comprehension between author and reader.

Mirroring is a term used in various senses across the literature, though most usually to indicate either the human function of mirroring or the therapeutic intervention of mirroring. Since it will be used throughout this paper in both ways, I will clarify the context at points where meaning could be confused.

The human function of mirroring is a social process that naturally emerges in infancy and plays an integral role in attachment and identity formation (Bowlby, 1952, 1963; Tronick et al., 1978; Winnicott, 1965, 2016; Fox et al., 2011, 2017). Though it may appear in infancy as a fairly simple duet of reciprocal mimicry, imitation of affect, and kinesthetic response between caregiver and infant, it has been found to be a complex behavioural, neurological, interpersonal process that influences self-concept, self-regulation, intellect, empathic recognition, and interpersonal skill throughout a human's life (Siegel, 2012; Fox et al., 2011, 2017; Gallese et al.,

2007; Rutter et al., 2010; Tronick et al., 1978). Mirroring occurs largely unconsciously and is a primary vehicle for co-regulation (Siegel, 2012; Stolorow, 2013). It is present over the course of development, though it expresses in subtler, more socially-nuanced ways towards adulthood, by which time it includes more verbal reflection and has adapted to social relationships outside of the nurturance context (Blakemore, 2008; Fonagy, 2008; Harnden, 2014; Straayer, 2020).

The therapeutic intervention of mirroring is a therapist's use of various kinds of imitation, physical replication of affect or behaviour, and/or verbal reflection of affect or behaviour with the intention of supporting a client's therapeutic goals (Hill, 2014; Landreth, 2023; Yalom, 1985). Often this intervention is used to help a client feel seen, understood, and/or accepted (Hill, 2014; Landreth, 2023; Yalom, 1985). Mirroring as an intervention occurs in a wide range of modalities with much variation in its execution, including in group therapies where it is encouraged between participants. Although therapeutic mirroring is a conscious intervention, during sessions a therapist (or client) may participate in mirroring in its sense as an unconscious, natural human function, which can be therapeutically beneficial in addition to the intervention.

The mirror game is an intervention specifically used in drama therapy and dance/movement therapy that involves two people facing each other and attempting to mimic one another's improvised movement (Boal, 2002). The version referenced in this text follows Augusto Boal's (2002) description of the rules, wherein the participants take turns leading the improvised movement until they become so synchronized that the leader is indistinguishable. There is also a version referenced in the literature review with a slight variation to these rules, in which the facilitator dictates precisely when the changes between leaders occur and how much time is spent in each leading configuration (Feniger-Schaal et al., 2022).

Methodology

Using a scoping approach to this literature review and theoretical research, I will gather existing literature on the subject of mirroring in drama therapy and the expressive arts as it is seen to impact attachment, especially where it is informed by perspectives from neuroscience and developmental studies of attachment. The review will examine the application of drama therapeutic mirroring from infancy to adulthood in parallel to a review of the developmental role of mirroring in attachment and identity formation throughout these life phases. I will then offer what I see as connections across the literature that enlighten one another, particularly insofar as they indicate a basis for future drama therapeutic attachment research and the development of attachment-oriented interventions (Booth et al., 2016). This approach aims to deepen the

understanding of the use of drama therapy in therapeutic processes oriented towards attachment and to draw connections between various quantitative and qualitative modalities and frameworks for attachment and attachment theory (Booth et al., 2016). This method avoids ethical concerns that could arise with the involvement of participants in an area so sensitive as attachment and works within the resource limitations of this research context. Further, this method supports gathering a wide range of information in the pursuit of understanding gaps in the literature (Booth et al., 2016). This approach will endeavour to answer the question: is there support in the literature indicating drama therapeutic mirroring techniques could be effective in attachment therapies for adults?

Data Collection

This data was gathered from an initial search using configurations of these search terms: drama therapy, mirroring, and attachment. A secondary search was conducted with additional configurations of these words: mirror neurons, neuroscience, adolescent, adult, and attunement. The sources were gathered from databases including SAGE publications, Intellect Discover, ScienceDirect, National Institute of Health, JSTOR, and Concordia's Sofia database. The material was first scanned and selected according to title-relevance. It was then further specified according to the material outlined in each abstract. The materials deemed most relevant to the research subject were also used to identify additional relevant sources through their reference lists. This was partially in support of refining the understanding of specific complex frameworks. In addition to peer-reviewed, published journals, a number of the sources selected in this way were books which were sourced from local libraries, academic libraries, and private collections. In addition to peer-reviewed, published literature, I also occasionally drew on scholarly communications by authoritative figures in the field. Additionally, in the case that a term or concept was unclear to me in one of my selected sources, I consulted its reference list for clarity and conducted a separate search using the specific topic to define the parameters of the search.

Data Analysis

I informed my process of analysis with a content analysis technique adapted from analyzing content generated by qualitative interviews (Boon, 2017; Murphy & Wheeler, 2016). The system operates as follows:

- a) Coding of domains (clustering the data);
- b) Coding of core ideas (summarizing the data);

c) Cross-analysis (constructing common themes across the data), (Murphy & Wheeler, 2016).

All this is to say that the literature was reviewed and organized according to themes that emerged in the data and cross-organized according to commonalities and differences. Areas of complimentary implication to one another, as well as areas of conflicting concepts, were highlighted with the intent to generate further lines of inquiry.

Position of Researcher

My positionality as a white, queer, genderfluid ADHDer of the millennial generation, as well as my work experience in both theatre and creative arts therapies, are very likely to have influenced the way that I have gathered and analyzed this data and have most certainly shaped the conclusions I have drawn in the wake of this research. Importantly, my North American cultural context has strong influences on the ways I understand attachment processes, which are a major focus of this research. I would also say that the way I engage with this work is queer in its essence and that this work exists in queerness beyond sexuality; rather, it exists in a queerness that invites us to approach the world, not necessarily in the ways we have been told are true, but to delight in the ways that we know are possible. This queerness invites us to embrace knowings of ourselves that may feel both familiar and not, and may ultimately help us to move into a fuller, deeper future.

Chapter 2: Literature Review; *Refraction*.

I kept fiddling with my phone through dinner
because I was fascinated
that every time I tried to type *love*,
I miss the *o* and hit *i* instead.
I live you is a mistake I make so often,
I wonder if it's not
what I've been really meaning to say.

- Jamaal May (2016), excerpt from *Macrophobia (Fear of Waiting)* (p. 47).

The Intersection of Neuroscience, Drama Therapy and Human Behaviour. (*In which our bodies run the game.*)

In the grand scheme of the many modalities that humans have developed in the pursuit of self-understanding, it might seem that expressive arts therapies are at odds with scientific approaches to the self. Despite the common goals across modalities to create thorough, productive systems of intrapersonal observation as well as effective, compassionate methods of interpersonal understanding and communication, and the aspiration towards an actualized

collective, generally, there might appear to be tension between quantitative and qualitative approaches, with varying degrees of rejection on either side towards the other. The sterile precision of the sciences struggles with the fertile cross-pollination in the arts, while the faith-driven intuition of the arts struggles with the logos-driven curiosity of the sciences. For the purposes of this work, I offer a period wherein we allow this contention to relax. I invite the reader to recognize that the artful pollination of ideas thrives with a scientific understanding of their workings and that the scientific pursuit of answers can continue only with an artful faith in the unknown of humanity. O’Kelly (2016) describes the alignment to be found between arts therapies and neuroscientific approaches, offering that the sciences do not hinder, nor reduce, nor outperform the arts. Rather, they complement and expound upon the praxis of arts therapies, creating deeper and more dynamic possibilities in the arts, as well as adding a powerful precision to the implementation of expressive arts interventions (Malchiodi, 2012; O’Kelly, 2016). This said, although neuroscience offers a distinct advantage to the development of arts interventions, it, in particular, greatly simplifies their mechanisms, and therefore it must be used as a support, not a rule book or equation for the effectiveness of an intervention (Johnson, 2009; Strong, 2017).

In the context of this writing, neuroscience will provide an understanding of the intrinsic nature of attachment and identity formation, while drama therapy will offer an extrinsic approach that is inherently compatible with this nature. This interplay between neuroscience and drama therapy highlights and is highlighted by the aforementioned themes across the literature: the processes of attachment and identity formation are integrated; in their essence attachment and identity are embodied experiences; the creative arts therapies are suited to attachment and identity work as sensory and embodied methodologies; and mirroring/mimicry are often inherently or explicitly present in creative arts attachment therapies (Berrol, 2006; Brassard, 2008; Broucek, 1991; DeYoung, 2015; Erfer & Ziv, 2006; Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022; Flickinger, 2019; Jennings, 2011; Jones, 2007; Johnson, 2009; Miller & Torkington, 2021; Lewis, 1988; Moore, 2006; Orange, 1995; Park, 2019; Schore, 2009; Siegel, 2012; Tronick et al., 1978; Versaci, 2016; Weber & Haen, 2016; Winnicott, 1957, 1965, 2016). Additionally, neuroscience offers the expressive arts a deeper understanding of the ways that identity formation and attachment formation are inherently connected (Blakemore, 2008; Esman, 1980; Fox et al., 2011, 2017; Gallese et al., 2007; Iacoboni, 2008; King et al., 2019; Somerville, 2013). This said, the neural

system alone cannot account for attachment. As Johnson (2009) cautions, “[v]iewing attachment in terms of mirror neurons rather than physical holding, for example, may have undesired ramifications in terms of clinical methodology later on, when it will be the neurons, not attachment, that are privileged” (p. 117). In keeping with this, Langer’s (2016) conception of identity directs us to a more complete, embodied intelligence of self which, “foregrounds the body matrix, a multisensory, neural body model” (as cited in Straayer, 2020, p. 262). Despite the paradox of trying to extricate one part of the system of body-mind from the whole, we will begin our learning by parsing mirror neurons and mirror neuronal systems from the rest.

Vittorio Gallese, one of the primary researchers to initially identify the existence of mirror neurons, describes the mechanism of their engagement as an *experience-based* reaction (Gallese et al., 2007). That is to say, the stimulation of mirror neurons is triggered by social, kinesthetic, and emotional ways of being (Gallese et al., 2007). This was found to be true in individuals who were performing behaviours as well as those who were witnessing them without partaking (Gallese et al., 2007). Umiltà (2016) and Brassard (2008) reinforce Gallese et al.’s (2007) work in the context of theatre performance, describing this as a crucial element in the social function of theatre, offering that theatre exists as it does because of these neural mechanisms and that theatre depends upon these neural mechanisms to have meaning, value, and impact in society. In other words, theatre depends on the social, interpersonal model of consciousness and the constant flow and synchronicity between perception and action; self and other (Umiltà, 2016). Brassard (2008) explains that the activation of mirror neurons does not require conscious recognition of the other, but conscious recognition of the other requires the activation of mirror neurons (Gallese, 2005, as cited in Brassard, 2008). That is to say, the mirror neuronal process occurs prior to the conscious perception of others' actions and emotions and is the prerequisite for emotional recognition and empathic understanding (Brassard, 2008). She reports that the audience relies on the engagement of the mirror neuron system in order to understand the performance, and through this activation of mirror neurons they are able to benefit from an emotional connection with the performers (Brassard, 2008). Umiltà (2016) describes that this chemistry in theatre, or rather, theatre as a meeting place for these social-neural functions, supports its role in our society as a vehicle for social cognition.

This aligns with Dan Siegel’s extensive writing on interpersonal neurobiology and offers insight into the neuronal process that underpins the circuit between an individual’s mind, brain, and relationships, and their consistent circular influence on one another (Siegel, 2012: Siegel et

al., 2021). As seen in Gallese et al.'s (2007) findings, as well as Siegel et al.'s (2021) writing, there is a clear trend of give and take involved in mirror neuronal processes and a social, experiential factor that is necessarily a part of human neurology. Neurobiologically, Iacoboni (2013) observes the physiological evidence of this give and take by way of the equally developed sensory and motor pathways in the spinal structure that indicate the equal importance of input and output in the mirroring process; that is, indicating bi-directionality in the mirror neuronal system. In harmony with this, Miller (2021) highlights the fact of expressive arts therapies as “working directly with the brain and nervous system” by way of the body and therefore having particular potential for working with attachment issues, drawing on the well-recognized fact that attachment is an experience of the body (p.18). She also describes the opportunity that expressive arts offer to address developmental attachment trauma, in that, within the modality it is possible to invite clients to access the developmentally relevant parts of their brain (i.e. lower brain systems such as the limbic system, or higher brain systems such as the prefrontal cortex) through expressive arts interventions that engage with those specific areas (Miller, 2021). Miller (2021) states that this is supported by relational neuroscience, and necessarily involves working with mirror neurons. While this argument rings with an intuitive truth and has been supported by numerous clinicians working at the intersection of neuroscience and the arts, Johnson's (2009) words of warning to practitioners across modalities remind us that this may also tempt us towards a misleading simplification of the human experience. While the arts offer access to neurology by way of the body, neurological systems are engaged diversely in many aspects of life (Johnson, 2009). The dynamic contexts of the arts are important aspects in their application to neurological processes, and vice versa; if we lose this nuance in either dimension we sacrifice precision and depth in our approach (Johnson, 2009).

Elements of Miller and Torkington's (2021) work refer back to Hass-Cohen and Findlay's (2015) book, *Art Therapy and the Neuroscience of Relationships, Creativity, and Resiliency: Skills and Practices*. Noah Hass-Cohen is recognized as one of the leading minds in the exploration at the intersection of neuroscience and art therapy, and her work with Joanna Findlay (2015), explores many cohesive aspects of neurobiological theoretical approaches in concert with expressive arts praxis. They specify distinct art therapy interventions that are neurobiologically suitable to attachment work, with a focus on what they name as *Relational Resonance*, which emphasizes co-regulation and co-creation throughout the expressive arts process (Hass-Cohen & Findlay, 2015). DeYoung (2015) describes the ways neurobiological

understandings of attachment can inform therapeutic approaches, specifically emphasizing the crucial role relational experiences play in the development of the self. DeYoung (2015) and Siegel (2012) both articulate attachment and identity formation as right-brain, emotional, embodied experiences, and they determine that therapy must therefore speak the language of the right-brain and engage with the embodied self in order to effectively address attachment and identity issues.

Since the expressive arts are modalities that engage with right-brain, social, kinesthetic, and emotional ways of knowing, they are particularly compatible with the natural, experience-oriented process of the mirror neuron system, and thereby with the natural processes of attachment (Berrol, 2006; Jones, 2007; Kapitan, 2014; Miller & Torkington, 2021). Drama therapy has a particular power for this experiential element of mirroring: with its tools in *role reversal*, *embodiment*, and *active witnessing*, drama therapy harnesses the experiential aspects of its form to bring the experiential aspects of the human function of mirroring into the therapy space (Bleuer & Harnden, 2018; Emunah, 2014; Jones, 2007) This indicates that drama therapy has significant assets to offer attachment-oriented work in various clinical settings across the helping professions.

These observations of the importance of right-brain engagement in therapy spaces invite us to recognize that, although neuroscience and neurobiology bring key elements of comprehension to attachment and identity formation processes, we underserve neuroscience without more holistically recognizing the integrated relationship between the nervous system and the body as a whole, including the behavioural and biological mechanisms that are the vehicles for mirror neuronal functioning in attachment processes (Johnson, 2009).

Mirroring as a Human Function

Before attempting to further explore the impact of the drama therapeutic intervention called mirroring, let us delve further into the impact of mirroring as a part of human function. Mirroring and mimicry are social behaviours that emerge in infancy and complexify throughout development (Jennings, 2011; Rutter & Rutter, 1993). Humans are inherently socially-oriented creatures, as is made evident by the natural emergence of this social behaviour, and the highly detrimental outcomes observed in the absence of social interactions such as mirroring, mimicry, touch, and attunement (Fox et al., 2011, 2017; Rutter & Rutter, 1993; Nelson, 2007; Traina, 2011). Attunement is a crucial element in the development of attachment and the healthy formation of a child's sense of self, and while it necessarily involves mirroring and the mirror

neuronal process, it is less basic in its function than that of mimicry (Bowlby, 1952; DeYoung, 2015; Fox et al., 2017; Winnicott, 2016). A robust provision of attunement combines the unconscious neuronal and behavioural processes involved in mirroring with proactive, conscious choices on the part of the caregiver that are informed by their respect, empathy, and care for their child (Prof. Bonnie Harnden, personal communication, July 6th, 2024; Bowlby, 1952; Fox et al., 2017; Landreth, 2023). In an attuned relationship, these choices will reflect an alignment between the child's needs and the caregiver's goals for the relationship (Bowlby, 1952; DeYoung, 2015; Fox et al., 2017; Landreth, 2023; Winnicott, 2016.). As found by numerous attachment theorists across history, this early nurturance alliance has lifelong interpersonal implications on a person's social interactions, including early friendships, romantic relationships, and their capacity later in life to provide an attuned nurturance experience for their children. These findings began with foundational attachment theorists such as Bowlby, Winnicott, and Ainsworth, and have been continually affirmed in increasingly detailed contexts by contemporary theorists. In addition to the interpersonal implications of these early attachment experiences, it has also been found that inadequate experiences of attunement in early nurturance relationships influence the intrapersonal experience, including a person's self-esteem (DeYoung, 2015), self-concept and inner world (Orange, 1995; Stolorow, 2013), perspectives on mortality (Greenberg et al., 1986), IQ and brain function (Fox et al., 2017), emotional regulation and capacity to self-soothe (Ainsworth, 1978; Landreth, 2023; Siegel, 2012), as well as overall psychiatric health (Humphreys et al., 2015; McLaughlin et al., 2012; Rutter et al., 2010). Cases of neglect, as observed in infants, can result in failure to thrive or death (Traina, 2011). Although this shows there are undoubtedly serious consequences to neglect, outcomes were found to be improved with the implementation of higher quality attuned childcare, with the more impactful change being observed when adequate nurturance was provided earlier in the infant's or child's development (Fox et al., 2011, 2017; Humphreys et al., 2015; McLaughlin et al., 2012; Traina, 2011).

Donna Orange's (1995) work in intersubjective psychoanalytic theory examines the interplay between individuals, including caregiver and child, as well as therapist and client, and how this interplay contributes to an individual's subjective intrapersonal experience. Orange (1995) and other theorists in this philosophy describe the subjective self as a product of one's relational experiences. They utilize psychoanalysis as an assessment of intersubjectivity, with the understanding that two or more individuals (subjectivities) in relationship with one another

create an *intersubjective field* which can influence the subjectivities involved in the intersubjective dynamic. This is to say, each of us is influenced by one another, and the space and time within which we interact is a dynamic experience that is made up of each of our individualities, and shapes the individuals involved. This aligns with Beaudoin and Duvall's (2017) articulation that one's experiences are, "both shaped by, and shaping of, the brain" (as cited in Miller, 2021, p. 6). Indeed, when Orange (1995) describes this interplay as the process of creating subjectivities, she is describing the formation of a felt sense of identity. Although at first reading the language used in intersubjective psychoanalytic theory may seem to live in the world of intellect, it remains true that the formation of the intersubjective field begins with the body and felt experience, as all elements of identity formation and attachment do. The intersubjective field cannot come into being without the body-to-body communication experience of caregiver and child, and the embodied experience lives at the core of the intersubjective field throughout a being's life (Winnicott, 1971). From a behavioural perspective, Stolorow's (2013) text, *Intersubjective System Theory* describes the developmental importance of intersubjective interaction as a facilitator of emotional organization. Skill in emotional organization precedes skill in emotional regulation, in that it allows a person the capacity to determine what their emotions mean to them in a given context, which in turn allows them to regulate their inner world in a way that is appropriately responsive to their outer world (Siegel, 2012; Stolorow, 2013). Mirroring from a nurturance figure is the primary vehicle for categorizing and comprehending emotion during the early years of a person's life: when a child experiences emotion, they rely on their caregiver to offer insight on the urgency surrounding the feelings, the context for the feelings, the language needed to describe them, and the due course of action in the presence and wake of emotion (Prof. Bonnie Harnden, personal communication, May 12th, 2024; Landreth, 2023; Siegel, 2012). This last factor involves the caregiver attuning to the child's world and offering an experience of co-regulation which the child can orient to as they move through their emotional experience, thereby laying the groundwork for the child's future capacity to self-regulate (Landreth, 2023; Siegel, 2012; Tronick et al., 1978). Stolorow (2013) specifies that this relational, developmental process of organizing emotional understanding is done unconsciously and automatically, and a child will therefore automatically integrate both nourishing and damaging co-regulatory experiences. This is to say that a child is not able to choose to integrate only skillful, attuned co-regulation from their nurturance-mirror, partially because the unconscious nature of emotional organization unfolds by the grace of the

unconscious, automatic activation of the mirror neuronal system (Gallese, 2005, as cited in Brassard, 2008).

Helen Block Lewis' (1988) work in shame theory also originates in the understanding of identity formation as a relational process connected to attachment, with an emphasis on the importance of affect attunement in the formation of attachment and self. She offers the framing that we understand ourselves to be real primarily through the illumination our caregiver casts upon us, and we learn the particulars of our existence and who we are through our caregiver's gaze and communication (Lewis, 1988). This could be conceptualized as a more global application of the principles of emotional organization: it is the organization of the full self through the mirror of the caregiver. Lewis (1988) identifies feelings of shame as attachment-related responses to one's perception of affectional ties within meaningful relationships as being threatened. In other words, she articulates shame as an emotional response that attempts to maintain closeness in relationships by reacting to perceived threats of rejection or separation (Lewis, 1988). Within her theory, shame occurs when a person senses the possibility of rejection (real or imagined) within a relationship, and the emotional self sends out painful signals of shame that warn of the subsequent separation or relational distancing that might follow the rejection (Lewis, 1988). This essentially identifies shame as a response within the realm of separation anxiety (Lewis, 1988). This framing of shame as an expression of separation anxiety offers a point of connection with Ainsworth's (1978) foundational work distinguishing categories of attachment patterns, further strengthening the concept that the functions of identity and attachment are circuitous in nature.

Francis Broucek (1991) also connects the formation of identity with the attachment process of mirroring, describing the sense of self as "founded on efficacy experience and primary communion with the caretaking other" (p.32). He offers that the child's sense of self will increase in coherence, expansiveness, and strength through what he names as *communion* with the caregiver (1991). This communion is what I have previously described as the attuned mirroring process that takes place in a healthy nurturance relationship, wherein a caregiver aligns their actions with the child's needs. Patricia DeYoung (2015), in her work on the relational aspects of shame, offers clarity to Broucek's (1991) use of the phrase *efficacy experience*, defining this as a congruous match between infant cues and parental facial responses and gaze. In this, she connects these theories of Broucek's (1991) to Tronick et al.'s (1978) still-face experiment, which conducted observations of infant dysregulation in response to disengaged

parental gaze in a controlled environment (as cited in DeYoung, 2015). Broucek (1991) describes a failure of parental attunement during early life as weakening the sense of self in its development, observing that a weakened sense of self is related to the unhealthy development of the child's inner voice. He identifies that the caregiver's interaction with the child may support the child in strengthening their sense of their subjective experience, or it may instill in them a self-objectifying inner voice (Broucek, 1991). This self-objectifying inner voice often focuses on the child's accomplishments, failures, and material value, rather than their efforts and inherent worth, and it will divorce the child from their own internal motivation, skill in self-understanding, and inner knowing (Broucek, 1991). The objectifying perspective of the caregiver may be of a positive or negative nature, but in either case it will focus on external motivation and material accomplishment, and it will result in the child internalizing objectified concepts of who they are (Broucek, 1991). DeYoung (2015) and Schore (2009) elaborate on these theories of inner thoughts, explaining that a child's embodied, felt experience of themselves is grounded in the right-brain, while their cognitive observer self, is grounded in the left brain. DeYoung (2015) states that, when the child comes to an age wherein it is developmentally appropriate that they connect cognitions to their felt sense of self, they will borrow from their caregiver's perspective, employing the thought patterns their caregivers have mirrored to them (DeYoung, 2015). In this way, whatever it is that the caregiver has offered as context for the self and the world, the child will find that caregiver's voice within themselves, by way of the unconscious process of internalizing it (Schore, 2009).

As we bring these understandings of the neuronal, biological, and behavioural aspects of mirroring, attachment, and identity into our exploration of drama therapeutic mirroring, I would like to return to Miller's (2021) point that the embodied nature of the expressive arts therapies provides very tangible access to attachment and identity processes via the body, which, as is observed across the literature, is the grounds for attachment and identity in a very literal sense. If we accept the indications in the literature that attachment and identity are made up of the body, the embodied relational experience, and the corporeal experience of mirroring and attunement, our exploration of the embodied aspects of drama therapy deepens considerably.

Mirroring as a Drama Therapeutic Intervention

Throughout this text I will refer both to *mirroring* and to *the mirror game*. Though these interventions are related, they are distinct. To begin with, the mirror game involves mirroring, though mirroring does not occur only within the mirror game. The intervention of mirroring is

widely used to inform therapeutic processes in the creative arts therapies as well as other modalities (Bleuer & Harnden, 2018; Hill, 2014; Landreth, 2023; Rogers, 2023/1951; Yalom, 1985). It necessarily involves the neuronal processes of mirror neurons, as described previously, though, as observed, the engagement of mirror neurons occurs in many circumstances outside of mirroring as an intervention. In accordance with the literature across various therapeutic modalities, we will define therapeutic mirroring as any intentional use of mimicry, copying, imitating affect or behaviour, and/or verbally reflecting affect or behaviour on the part of the therapist (or encouraged by the therapist between group members) as an effort toward achieving a client's therapeutic goals (Hill, 2014; Landreth, 2023; Yalom, 1985). Often this intervention is used to help clients feel seen, understood, and accepted (Hill, 2014; Landreth, 2023; Yalom, 1985). Meanwhile, the mirror game is an intervention with a specific set of rules which can be simplified as such: two participants face one another and mimic one another's movements as closely as possible, taking turns to lead the movement until the point that the leading is collaborative. Though this exercise, and those similar, have existed since time immemorial in ancient practices of movement and dance, in the context of theatre and drama therapy, this exercise is notably described by Augusto Boal in his text *Games for Actors and Non-Actors* (2002) within the *mirrors sequence* (p.120). Boal's (2002) *mirrors sequence* encourages participants towards a togetherness and fluid leadership that renders the roles of leader and follower indiscernible from one another. Once the dyads have reached this place of togetherness, Boal's (2002) sequence moves the mirroring from dyadic to group contexts before closing the sequence with collective, synchronized movement. With this basic understanding of mirroring and the mirror game, let us examine the presence of these tools in the expressive arts therapies.

Mirroring is built into the basic tenets of dance/movement therapy as well as those of drama therapy. We see it in drama therapy as the core process of *active witnessing*, as written by Phil Jones (2007), while in dance/movement therapy we see it as the core principle of *empathic reflection and mirroring*, which was initially contributed to the field by Marian Chace (Levy, 1992; Sandel et al., 1993). Although the concept of mirror neurons and their role in attachment and identity formation were not articulated in the field of neuroscience until the early 1990s, embodied therapeutic modalities have long been engaging with these systems in therapeutic contexts. It has also been widely recognized in the field of dance/movement therapy that mirroring specifically benefits attachment outcomes in therapy and is connected to self-image as well as skills in self-regulation (Berrol, 2006; Erfer & Ziv, 2006; Levy, 1992). This is to say,

practitioners in dance/movement therapy have closely connected the attachment benefits of mirroring with its beneficial effects on identity formation and sense of self. Erfer and Ziv (2006) state that the sense of self is experienced physiologically and can be engaged with through one's felt experience of body image. Relating to this, they conclude that, "a child who has an impoverished body image and self-awareness can hardly be expected to interact effectively and meaningfully with others" (Erfer & Ziv, 2006, p. 240). Again, in this there is resonance with Siegel's (2012) concepts of the connections between the mind, brain, and relationships, as well as with Orange's (1995) and Stolorow's (2013) writings on intersubjectivity, and Lewis' (1988) and DeYoung's (2015) work connecting shame theory with the symbiotic formation of attachment and self-image. As we shift our focus along the continuum of the sciences and arts, there remains consistency in the concepts of attachment and identity formation as physiological, social processes (Broucek, 1991; Lewis, 1988; Orange, 1995; Schore, 2009; Stolorow, 2013; Tronick et al., 1978).

In addition to Berrol (2006), Erfer, and Ziv (2006), various prominent dance/movement therapists including Marian Chace, Susan Loman, and Penny Lewis articulate the intrapersonal and interpersonal benefits of mirroring and attunement between therapist and client in dance/movement therapy (Levy, 1992). This application of mirroring uses movement to engage with Yalom's (1985) concept of the *here-and-now*. This is to say, the here-and-now of the relationship between the therapist and client becomes a focal point for the client's process, allowing them to process their relational challenges in the context of the therapeutic relationship. While this may highlight contention in the therapeutic relationship if, for example, the client has contentious interpersonal challenges to move through, it may also allow the client to feel more deeply understood and connected with the therapist, and thereby deepen their access to the therapeutic potential of the relationship (Rogers, 2023/1951; Yalom, 1985). According to dance/movement therapist Fran Levy (1992), Marian Chace articulated mirroring as a kinesthetic means of expressing to the client, "I understand you, I hear you, and it's okay" (p. 26). This draws significant resonance to Landreth's (2023) *Being With Attitudes*, in Child Centred Play Therapy (CCPT) (Landreth, 2023). CCPT engages the mirror-based skills of reflecting feeling, content, and meaning, and of tracking behaviour in order to communicate, "I am here. I hear you. I understand. I care. I delight in you!" (Bratton & Landreth, 2020, p. 133). These applications of mirroring between therapist and client demonstrate the therapist's role in attunement beginning to emerge. While in some modalities this attunement is implicit, in

dance/movement therapy it is made explicit. This is evident in Sarah Loman's pursuit of attunement using the Kestenberg Movement Profile system of movement analysis, which she applied in order to facilitate attuned experiences between therapist and client with the goal of benefitting the client's relational experiences outside of therapy (Levy, 1992). In this, we can observe attunement as an aspect of attachment that gives form to the therapeutic alliance (Hill, 2014; Rogers, 2023/1951; Stern, 2004; Yalom, 1985). Further, this opens our understanding of how the therapeutic relationship can offer access to the attachment experience, and thereby to the experience of identity, using, as DeYoung (2015) describes, the right-brain to right-brain communication that is necessary for a beneficial therapeutic alliance.

With this deeper understanding of the intervention of mirroring as an embodied way of communicating and engaging with attachment and identity, let us focus more specifically on the mirror game in the context of drama therapy as it is described by Boal (2002). Similarly to other exercises drawn from theatre, the mirror game is not exclusively used in drama therapy, though its application in a therapeutic context is distinct from its application in a recreational, educational, or professional theatre space. Across these spaces there may be commonalities in the goals of its use, including those such as the effort to foster group cohesion, the hope to heighten attunement between group members, and the intent to support self-awareness and connection to the body (Berrol, 2006; Boal, 2002). Even while considering these similarities, the way the intervention is held will differ significantly in a therapeutic space as compared to a professional, recreational, or educational context. I will speak from my own experience over the years of implementing the mirror game in group contexts across these various settings.

While in a non-therapeutic space it is common to find an emphasis on becoming more skillful at the mirror game as evidenced by the externally observed synchronicity between participants, in a therapeutic space there will be an emphasis on the participants' experience within the exercise. There is cross-over between these approaches, in that a dyad in a professional context that strives to present in high synchrony is also likely to benefit from an inner sense of mutual connection, and their felt mutual connection is, in turn, likely to contribute to an improved performance. We can observe this as entirely natural if we return to Siegel's (2012) discussions on interpersonal neurobiology, in that the mind influences the brain, which in turn influences our relationships, which in turn influence our mind, and so on. It is possible that a drama therapist bringing a cognitive-behavioural framework could choose to emphasize this performative aspect of the mirror game with the goal of beneficially influencing the clients'

inner worlds. Even so, the differing point between these approaches is that the first is goal-oriented while the second is process-oriented.

In a process-oriented therapeutic context, meaning is made of the participants' execution of the exercise primarily according to their experience within it. The meaning that therapist and client make of the exercise is dynamic in quality, rather than measured linearly on a scale between more and less skillful. For example, if two participants choose to mirror only the micro-movements of one another's outermost appendages, or do not accurately mimic one another at all, meaning is made according to such elements as the degree of satisfaction, resistance, ease, connection, dissonance, etc., that played out within them, and all information from their inner world is accepted as success within the exercise. That is, the meaning made from this exercise if the dyad mutually experienced a sense of togetherness and accomplishment is very different from the meaning made if they mutually experienced discomfort and resistance, versus the meaning made if they experienced a sense of joy throughout, but in the aftermath fell into dread or embarrassment. This becomes further enriched if the individuals in the pair had differing experiences, which is likely, even while they may have had a harmonious experience within the bounds of their difference. Importantly, in each scenario I have described, the ultimate goals of furthering understanding and accessing the relational dynamics in the dyad have been accomplished. There are an infinite number of ways this could be illustrated, but for the moment, suffice to say that the therapeutic space desires understanding of its participants as they are, and accepts this information however it may present itself, whether that be with technical skill, or without. In the discussion portion of this paper, I will query the value of bringing more attention to the observable technical execution of the mirror game in a process-oriented therapeutic context. Although observing execution is more obviously relevant in the literature regarding the application of the mirror game as an assessment tool, it may be beneficial in both contexts, despite the differing purposes.

The above description is specific to the dyadic portion of Boal's (2002) mirror sequence wherein two parties attempt to mimic one another without transitioning to a group context; however, the basic elements of this dyadic mirror game are applied to many interventions in drama therapy for individuals, dyads, and groups. These include, but are not limited to, interventions such as the sound and movement check-in (Emunah, 2014), the fluid sculpt (Volkas et al., 2020), the magic box (Emunah, 2014), various aspects of psychodrama (Baim et al., 2013; Kellerman, 2013; Moreno, 1971), various interventions in playback theatre (Ellinger &

Ellinger, 2020), as well as core elements of Neuro-Dramatic Play (NDP) and Embodiment-Projection-Role (EPR) method (Jennings, 2011). Each of these interventions and frameworks explicitly uses the basic principles of the mirror game wherein two or more parties imitate one another's observable, embodied presentation, as well as incorporating the generally therapeutic sense of mirroring wherein a therapist reflects the client in some way in order to support their therapeutic goals. Notably, psychodrama, NDP, EPR, and playback theatre heavily incorporate the reflection of verbal gestures as well as physical gestures (Baim et al., 2013; Ellinger & Ellinger, 2020; Kellerman, 2013; Jennings, 2011; Moreno, 1971) and NDP and EPR are both approaches developed by Sue Jennings (2011) as attachment therapies, although they are oriented to infancy and early childhood, not adulthood.

Versaci (2016) has written on a concept she labels as the "theatre of attachment" (which is distinct from Moore's (2006) *Theatre of Attachment*), that echoes elements of Jennings' (2011) EPR paradigm. Like Jennings' (2011) work, it is based on the concept that attachment formation is acted out as a process of both the caregiver and the child giving and receiving cues from one another. Versaci (2016) highlights drama therapy's inherent capacity to engage and play with mirroring and attachment behaviours through the use of the core processes of *aesthetic distance*, *role*, *interpersonal exchange*, and *metaphor*, offering that this positions it uniquely as an attachment therapy for relationships that have survived attachment adversity. She posits that drama therapy can use these techniques to create what Winnicott (1965) named *the holding environment*; a necessary aspect for attachment security to form (Versaci, 2016). She states:

this may be fostered through mimicking exercises in which the caregiver is invited to copy the child's movements or sounds. Deeply witnessing one another is essential for the ability of the child and the caregiver to engage in meaningful intersubjective exchanges, which will ultimately form the dramatic action of the theatre of attachment. (Versaci, 2016, p. 235)

Jennings (2011) also emphasizes performance and witnessing as crucial elements of her work in work in NDP and EPR, and calls on the work of Moore (2009) as support. Moore's (2009) *Theatre of Attachment* facilitates scripted performance pieces for adoptive families to encourage attachment bonding by using the performances as a way of exploring the child's life story and the various roles available to both caregiver and child. Moore (2006) describes the importance of this process as allowing the child to grieve for their previous experiences while offering an embodiment of their adoptive parents' empathy for them. She explains that this

grieving is necessary for the child to be able to reattach in their adoptive family (Moore, 2006). The performative element of her work is based in mirroring as a tool for facilitating empathy between caregiver and child, in that, “even an audience of one or two can act as a mirror to reflect the child’s projection, helping both realise that they share the same emotions and frustration” (Moore, 2006, p. 65). These principles of empathy-building, which Moore’s (2006) work depends upon, are supported by the essential function of mirror neurons themselves. This has parallels with Brassard’s (2008) work exploring the engagement of the mirror neuronal system during theatre performance.

The combination of role work, performance, and attachment therapy has also been explored by Haen and Lee (2017) in their work attempting to integrate Robert Landy’s (1993, as cited in Haen & Lee, 2017) role method and theory of distancing with John Bowlby’s theory of attachment (1980, as cited in Haen & Lee, 2017). Haen and Lee (2017) draw parallels between Bowlby’s concepts of insecure attachment styles and Landy’s concepts of aesthetic distance, offering that over-distancing aligns with the emotional suppression that denotes an avoidant attachment response, and under-distancing aligns with the emotional heightening of an anxious attachment response. Haen & Lee (2017) propose Landy’s distancing theory as an accessible metric during attachment-oriented therapies as a means of broadening a client’s repertoire of interpersonal strategies. This process begins with the therapist mirroring the client in their current comfortable zone of distance, and gradually, through role-play, expanding the client’s tolerance for interpersonal connection by inviting them into roles at the less comfortable end of the spectrum of aesthetic distance (Haen & Lee, 2017). As can be recalled from Moore (2006) and Jennings (2011), the performative aspects of this role-playing process inherently involve mirroring. Similarly, Wood’s (2018) clinical work with families struggling with alcoholism also observes this phenomenon of self-recognition and self-reflection through witnessing, and affirms that family units which are given the opportunity to perform for and witness one another benefit from deeper emotional connection. Role-playing in performance and the mirroring that deep mutual witnessing allows are important elements of Moore’s (2006), Jennings’ (2011), Wood’s (2018) and Haen and Lee’s (2017) work, alike.

There are other closely related interventions that engage mirror neurons and mimicry but do not incorporate the element of mutual witnessing that is key in the mirror game, mirroring, active witnessing, and role-play, alike. One such is called *flocking* (Pomer, 2002): although flocking uses similar rules to the mirror game, it is meant as a group intervention wherein the

positioning of the participants clearly distinguishes a group leader, though, as with the mirror game, the leader does shift throughout the exercise. All members are placed facing in one direction, and they follow the person foremost in the group until the point that the orientation of the group as a whole shifts to another leader (Pomer, 2002). While it lives in the realm of mimicry and embodiment and is often used to support the attachment-related goal of group cohesion, it is lacking the crucial element of the mirror game wherein all parties are reflected back to themselves and witness themselves being reflected.

This last facet, wherein the client witnesses themselves being reflected, creates what Harnden (2014) names “the electric mirror” (p. 148), involving what Jones (2007) calls “the audience’s aspect of themselves” (p. 102). Reflecting on their clinical practices involving drama therapy and talk therapy, Bleuer and Harnden (2018) describe the drama therapeutic experience of the electric mirror as allowing a deepening in the client’s felt sense of being understood alongside a deepening in the therapist’s capacity to attune to the client. This is made possible by the meta experience of the client witnessing themselves through the dramatic medium. Not only is the client reflected by the other, but the client experiences themselves through the body of the other, and can become audience to themselves in the space of the dramatic reality created by the intervention. Within this dramatic reality, the other becomes an animate surrogate for the self. This differs from the experience of witnessing oneself in a mirror on a wall, in that the reflection in the electric mirror is created by another being with will and self-determination: the reflection does not occur incidentally, rather it occurs because one person attuned to and interpreted the other’s existence, and used empathic decision-making to recreate it as closely as their humanity allowed. These strengths of the electric mirror are evident in the work of Jennings (2011), Wood (2018), and Versaci (2016), as well as approaches such as playback theatre, psychodrama, and theatre of the oppressed (Baim et al., 2013; Boal, 2002; Ellinger & Ellinger, 2020; Kellerman, 2013; Jennings, 2011; Moreno, 1971).

Mirroring in Infancy and Childhood. (*In which children become themselves.*)

they come from our bodies
 from our hard work
 from our dreams
 from our desires
 and they need us to hold them close
 so they can become themselves
 they need us in the wilderness
 however it appears
 within and without

to be that greater love
 to answer every question
 without violence
 to cover them with those kisses
 that cause them to giggle
 that let them know
 from the cosmos
 they found a place to belong
 on this earth
 in this time
 in these hands
 they are all ours

- adrienne maree brown (2012), excerpt from *love letter to the babies/they are all ours*

Given that the extensive body of literature reinforcing the importance of mirroring in attachment and identity formation has largely been formulated based on observations of children, please consider this next overview of mirroring in infancy and childhood as a direct continuation to the previously described foundational principles of these embodied processes.

Winnicott (1957; 2016) describes the crucial role a caregiver plays in the formation of an infant's sense of individuality, going so far as to say that, when the baby looks into their caregiver's face, the baby sees *themselves* because the caregiver will always be reflecting what they see of the baby. In Harnden's (2014) words, "I see you seeing me—therefore I am" (p.132). Kleeman's (1971) ideas on the formation of gender identity align with Harnden's (2014) and Winnicott's (1971) framing of the self, offering that mirroring plays a key role in the emergence of body image and self-recognition, concluding that the earliest self-concept is an embodied self more so than a psychic self. Winnicott (1957) emphasizes the importance of this dependence in these early stages of the baby growing to understand their individual self, as well as emphasizing the very physical, physiological nature of the connection. Winnicott (1957) describes what present-day neuroscientists might connect to the automatic, unconscious nature of mirroring and mirror neurons; he determines that the process of adequate attunement and adaptation to the infant's needs is beyond the scope of conscious decision-making and can only authentically and sufficiently originate from a place of sincere love on the part of the caregiver. If the caregiver can provide good-enough attunement and presence, the child will begin the formation of a dynamic, stable, empathic sense of self and the world (Winnicott, 1965). If the caregiver cannot provide this, then the child will conceal the true-self and begin developing a *false-self* which is designed to survive the inadequate nurturance relationship and to withstand the hardships of a misattuned world (Winnicott, 1965; 2016). The depth of this experience can extend, not only to a

pervasive sense of being unlovable, but to an absence of the sense of self, or a sense of self that is collapsed into shame (Ayers, 2003; DeYoung, 2015; Winnicott, 2016). Since this core sense of shame is instilled in preverbal stages of development, and via embodied processes, it is not often accessible to verbal processes or intellectual cognition (Ayers, 2003). Bowlby's (1963) work also cautions of the dangers of a misattuned or neglectful caregiver, citing numerous, life-long psychological impacts on an individual's health. Bowlby (1963) made this statement during a period long before there was the abundance of empirical support that we benefit from today, though his statements withstand the test of time: the ingredients built into our early attachment experiences strongly influence our later experiences of self and other (Bowlby, 1963; Lopez, 2009). This positions us to explore how these early ingredients in attachment might be useful guidance in applying embodied processes such as the mirror game to the treatment of attachment issues in later life.

Applying the Principles of Mirroring in Therapies for Children

While the drama therapeutic processes outlined below do not explicitly recommend interventions labelled as *the mirror game*, each of these works engages mirroring, mimicry, and/or mirror neurons as a part of their theory, assessment, or intervention (Erfer & Ziv, 2006; Jennings, 2011; Moore 2006; Versaci, 2016).

In their work with children, Erfer and Ziv (2006) draw on the dance/movement understanding of the physiological bases of identity and attachment, and the interplay between self and other that is inherent in the formation of each. To support children in a psychiatric inpatient program to develop group cohesion and strengthen their relational skills, they offered mirroring as an intervention between dyads and within a larger group (Erfer & Ziv, 2006). Although they did not expressly name this as the mirror game, the parameters of the intervention were the same. The children were invited to mirror one another in dyads, as well as to mirror the therapist in a group context (Erfer & Ziv, 2006). They found that the participants in their groups showed increased security in their attachment with self and other by displaying more frequently pro-social behaviour in their lives outside of therapy, as well as heightening group cohesion within the therapeutic context (Erfer & Ziv, 2006). Erfer and Ziv (2006) encourage fellow practitioners to focus on providing children with embodied tools for learning self-regulation and interpersonal connection based on the understanding that these embodied experiences in the therapy space will not only gesture at the healing needed outside of therapy but will provide actual, tangible access to the healing work as it plays out in the space.

Sue Jennings' (2011) theory of Neuro-Dramatic-Play (NDP) and the Embodiment-Projection-Role (EPR) paradigm, which I referred to briefly in the previous section, are also entirely founded on the concept of attachment as a bodily experience, and an embodied process between caregiver and child. Jennings (2011) emphasizes embodiment as the earliest stage of development in attachment formation and leverages this understanding in the use of NDP as a way of developing healthy parent-child relationships and a healthy sense of self-esteem in the child. That is, Jennings (2011) connects the embodied experience of the parent-child relationship with the formation of a healthy sense of self. Although Jennings' (2011) method is largely based in play, she does connect mirror neuronal functions to her interventions, specifically in the way they engage while a child is witnessing their caregiver (Whitehead, 2001, 2003, as cited in Jennings, 2011). Furthermore, the process of mirroring is inherent in her concept of *dramatic development* through infancy and early childhood, wherein she describes the progression from *consonant play*, through to *echoing, mimicry, mirroring, imitation, and initiation* (Jennings, 2011, p. 25). This details the developmental progression in a nurturance relationship wherein a baby moves from simultaneous or exact imitation of their caregiver into a reciprocal dramatic act of imitation back and forth, wherein each party reflects the other's sounds and actions, and each party takes a turn in the initiation of the mirroring (Jennings, 2011). NDP draws on this natural process of dramatic development as therapy, "... not only for healthy attachment and resilience but also for identity and self-esteem and the process of social integration into culture" (Jennings, 2011, p. 25). This provides a hopeful counterpoint for DeYoung's (2015) work in attachment theory and shame theory, wherein she describes attachment trauma as inciting the disintegration of the felt sense of self, leading to experiences of lifelong, chronic shame.

Similarly to Versaci's (2016) work with the theatre of attachment, Emunah's (1995) work with adolescents positions the dramatic action, or dramatic reality, as a way of bringing Winnicott's (1965) *holding environment* into therapeutic attachment healing. She describes this as becoming increasingly relevant at later stages of development. During these later years, as attachment and identity needs shift, therapeutic tools that were acceptable to younger clients come under scrutiny by adolescent clients. In order to understand the therapeutic relevance of the holding environment and the application of mirroring in therapies for adolescents, we will first examine the developmental processes that adolescent therapies must attune to.

Mirroring in Adolescence. (*Including the messy developmental tasks teenagers handle for us.*)

“Taiye and I used to be one cell, one zygote. Isn’t that wild? I sometimes wonder if we knew each other before birth, if we were sisters, or the same person who grew tired of herself and shed the parts she didn’t want. Perhaps I am the unwanted bits, the chaff, and Taiye the wheat.”

- Francesca Ekwuyasi (2020), excerpt from *Butter Honey Pig Bread* (p. 67).

A primary task of adolescence has been described as the development of a stable self-concept and sense of identity, requiring the adolescent to move through a kind of identity crisis (Bekaert, 2005; Blakemore, 2018; Diem-Wille, 2020; Erikson, 1968). This identity crisis, though tumultuous, is considered a productive, healthy process towards individuation (Diem-Wille, 2020; Erikson, 1968). Arnold Gessell’s (2011) concept of child development follows a cyclical pattern between equilibrium and disequilibrium, and he observed that individuating preadolescents and adolescents move through these cycles multiple times between the ages of 11 and 16 while they learn to understand their inner selves in the context of their outer world. In their work with insecurely attached adolescent clients, Weber and Haen (2016) identify that the outcomes of attachment therapies for adolescents are more likely to relate to healthy individuation, as marked by improved self-esteem and capacity to self-regulate.

Although mirroring is still a crucial element of attachment and identity formation, adolescents have moved into a phase of life wherein approval in peer relationships is of more prominent importance than approval in familial relationships, and the mirroring experienced in peer relationships becomes more impactful than it had previously been (Bekaert, 2005; Diem-Wille, 2020; Rutter & Rutter, 1993; Somerville, 2013). As a person’s capacity for abstract dynamic thinking complexifies in adolescence, so does their capacity to consider their self-hood, and they move into a stage of identity formation that many theorists compare to the individuation process that occurs at the age of two, wherein a person is able to conceptualize of themselves as separate from their caregiver and struggles with the loss that characterizes these changes as well as the unknown territory they engender (Blos, 1962, 1968; Emunah, 1995; Esman, 1980; Rutter & Rutter, 1993). Indeed, this aligns with Gessell’s (2011) cyclical model, wherein the years of 2 and 11 are both characterized by disequilibrium and the child’s sense of being at odds with their environment. Of course, the kind of separation that an adolescent seeks will be markedly different from that which a two-year-old seeks, partially because the adolescent era of individuation involves the additional elements of the adolescent’s body biologically preparing to be separate from their caregivers and partially because their increased capacity for mentalizing and abstract thought increases their capacity for complex relationships outside of their family

(Bekaert, 2005; Diem-Wille, 2020; Rutter & Rutter, 1993; Somerville, 2013). During childhood there is a tendency to live in a concrete world where behaviour and action are the primary markers of what makes a person themselves, whereas burgeoning skill in mentalizing and abstract thought begin to incorporate abstract elements into adolescent perceptions of others (Bekaert, 2005; Rutter & Rutter, 1993; Somerville, 2013). For example, an adolescent's abstract grasp of moral integrity will become more prominent in their concept of who the people around them are (Bekaert, 2005; Blakemore, 2008; Rutter & Rutter, 1993; Somerville, 2013). A person's social relationships in childhood are likely to be formed on a concrete basis, such as time spent in shared activities, whereas there is a shift in adolescent friendships towards bonding through emotional intimacy, a process deepened by their capacity to hold abstract concepts of one another (Rutter & Rutter, 1993; Somerville, 2013). It has been found that these changes are accompanied by heightened activity (as compared to adults) in areas of the brain associated with socioaffective circuitry that detect, evaluate, and organize social information, and then guide behaviour accordingly (Nelson & Guyer, 2011). These increases in mentalizing have also been found to coincide with heightened activity in what Blakemore (2008) terms as *the social brain*, indicating that adolescents place higher importance on the thoughts and feelings of others as compared to their adult counterparts. These neurological shifts underpin the strengthening of a network of attachments outside the adolescent's family, further preparing them to move towards adult life.

While an adolescent's skill in attunement and abstract thinking may be applied to their familial relationships, it remains important within the family structure that the caregiver upholds their role as attuned emotional container while the adolescent differentiates from the caregiver (Harnden, 2014). Though individuation can be a painful time in a nurturance relationship, through this period, the caregiver must demonstrate to their adolescent child that they are capable of surviving the tumult of the process while holding the relationship (Harnden, 2014). This is a kind of healthy hierarchy that ensures the adolescent child can continue to trust their caregiver for protection and survival. If an adolescent takes on the role of caretaking for their caregiver, their sense of being protected is put in jeopardy, which disrupts some of the most foundational aspects of attachment security in the nurturance relationship (Borchet et al., 2015, 2021). This parentification of the child can result in a particular kind of developmental attachment trauma that can impact the child's capacity to meet various developmental markers, including individuation, although the outcomes of this have been found to be dictated in part by

the overall health of the family system (Borchet et al., 2015, 2021). This having been found, it is also true that the impacts of parentification have culturally specific connotations, particularly as compared between collectivist and individualist societies. Though this theoretical research paper will continue with a Euro-centric, North American lens, it bears acknowledging that parentification and interdependence between parents and children have been observed to have positive effects in collectivist societies (Wei et al., 2021). All this to say, as a child moves into adolescent stages of building connection with tools of abstract, complex attunement, their peer relationships serve the powerful developmental purpose of building interpersonal skills and attachments based on mutuality and reciprocity, underpinned by a heightened social awareness (Bekaert, 2005; Rutter & Rutter, 1993; Somerville, 2013). This aligns with observations that adolescents often move through their behavioural developmental markers in concert with their peer groups and close friendships (Bekaert, 2005; Blakemore, 2018; Rutter & Rutter, 1993).

A significant developmental experience with further relevance to shifting attachment needs is that of the adolescent's transition from a child's sexuality to an adult's sexuality. While much of our identity is formulated in the mirroring process with our caregivers in early nurturance relationships, a facet of our identity which is not mirrored to us by our caregivers is that of our sexuality (Fonagy, 2008). Teenagers are tasked with the intense, messy, exhilarating, disorienting, humiliating process of crossing this territory from childhood sexuality to adult sexuality, and they must do so in the company of their peers. While we may hope their nurturance relationships have furnished them with tools in self-understanding, empathy, and confidence as they move into these new realms of relationships, it remains that they must do so without a caregiver as their mirror (Fonagy, 2008; Traina, 2011). Fonagy (2008) writes of the dysregulating conundrum this poses for the human psyche, in that congruent mirroring is a necessary part of integrating all parts of the personality, but caregivers do not have congruent tools to mirror their children's sexuality. This means that, by default, sexuality is a part of the identity that remains unintegrated until a person experiences developmentally appropriate, congruent sexual mirroring. Childhood sensuality is a very different matter from adult sexuality, and though the first forms a basis for the second, the two are not to be mixed, particularly not from an adult's world towards a child's world (Traina, 2011). This truth exists alongside the importance for children to explore their own experience of sexuality in safe, child-led ways while the adults in their lives uphold appropriate boundaries and promote healthy limits in the adult-child relationship (Traina, 2011). For example, it is very normal for children to explore

their body parts, including their genitalia, from a young age, even as early as infancy (Fonagy, 2008; Traina, 2011), and it is appropriate and safe for an adult to provide education about these body parts, including proper names, hygiene practices, and guidelines about consent (Dollin, 2016; Pop & Rusu, 2015). A safe, exploratory relationship with the body and with sensation during childhood supports an individual in growing into an adult with a secure, safe basis for their sexuality (Dollin, 2016; Winnicott, 1957). That is to say, a child who has been appropriately supported in developing a relationship with their body parts in a way that is not hyper-sexualized and not led by adult impulses will hold onto this security and confidence as they move into their adolescent and adult experiences of sexuality (Dollin, 2016; Winnicott, 1957). This childhood exploration may include the child's experience of their sexual body parts but is not limited to them (Traina, 2011; Winnicott, 1957). Rather, childhood sensuality is as it sounds – it is fuelled by *sensation*, and the child's experience of pleasure in general (Traina, 2011; Winnicott, 1957). This generalized exploration of pleasure and bodily experience formulates the basis for their adult experience of sexuality. Winnicott (1957) posits that the movement toward adult sexuality is united with the integration of sexuality with the personality, wherein a child's enjoyment of the sexual parts of their body moves beyond the scope of merely exploring sensation and anatomy, and eventually, "it is the child as a whole person who is excited in that specific way" (p. 160). In healthy caregiver-child relationships, this integrated sexual self will not be mirrored by our caregiver. It has been found on a multitude of occasions that a caregiver's engagement in sexuality with a child in any form has serious developmentally disruptive repercussions (Browning & Laumann, 2001; Sullivan Everstine & Everstine, 1989; Traina, 2011). Survivors of sexual abuse do not often receive the support necessary during childhood and often experience the repercussions of the abuse throughout their lives (Browning & Laumann, 2001; Sullivan Everstine & Everstine, 1989; Traina, 2011).

With these necessary and developmentally appropriate limitations to the mirroring within childhood nurturance relationships, it follows that, ideally, the sexual relationships we experience in adolescence are the first time in our lives that we are experiencing mutual, sexually integrated mirroring that moves from the sensuality of childhood towards adult sexuality. This has profound psychological implications, many of which are understandably difficult to answer for ethical reasons due to the vulnerability of the age group that handles the emergence of adult sexuality. This said, it has been made clear that individuation processes are supported by healthy childhood attachment experiences (Harnden, 2014; Siegel, 2012), and it goes to follow that the

incorporation of adult sexuality into the self-concept is a part of adolescent individuation that is no exception (Fonagy, 2008; Traina, 2011).

Although this paper hopes to understand the role mirroring has in adult identity and attachment relationships, an awareness of the transitional time of teenagehood allows us to conceptualize certain transformations of attachment needs as we move into adulthood. As such, the literature on adolescence indicates that experiences of attachment and identity later in life are not alienable from childhood (DeYoung, 2015; Fonagy, 2008; Harnden, 2014; Lopez, 2009; Winnicott, 1957). Despite the, at times stark, transformations from childhood to adolescence to adulthood, there is an enduring presence of mirroring and attunement across various, developmentally appropriate relationships in a human's life (Emunah, 1995; Fonagy, 2008; Rutter & Rutter, 1993).

Applying the Principles of Mirroring in Therapies for Adolescents

There is an unfortunately narrow selection of work detailing the use of mirroring in adolescent therapies, despite the feelings of isolation and different-ness that so often mark adolescence, and the deep need for a felt sense of acceptance and empathy (Emunah, 1995). Perhaps this is a response on the part of the field intended to support adolescent social tendencies. For example, actions and statements that may be perceived as mimicry can be activating for adolescent individuals due to heightened social sensitivity (Dr. Sue Bratton, personal communication, June 11th, 2024; Somerville, 2013), although imitating or emulating peer behaviour is an important element of adolescent development (Blakemore, 2018). On another hand, perhaps this limited availability in the literature is a response to the tendency toward outward rebellion that characterizes adolescence. There are recurring anecdotes across the literature on adolescent drama therapy that refer to adolescents initially mocking the therapeutic process; though, in the various case studies and scenarios where this was described, it always preceded a deepening in the clients' engagement. Renée Emunah (1995) describes the importance of allowing the adolescent client the space to make fun, be defensive, and rebel within the therapeutic process during the time in which they are learning whether or not it is safe to trust. This rebellion is also, in part, a developmentally appropriate response while the adolescent is trying to understand what their independence is and how to wield it (Bekaert, 2005; Emunah, 1995; Esman, 1980). Emunah (1995) proposes harnessing the dramatic reality as a tool to support clients in expressing and exploring these challenging behaviours and feelings.

Although adolescence is widely recognized as a highly tumultuous time in an individual's life, it is also a time of high potential for growth in the therapeutic space (Emunah, 1995). Emunah (1995) writes of developmentally appropriate interventions and contexts for adolescent drama therapy, as well as the great strengths that adolescents bring to a drama therapeutic space, including their inclination for acting-out, which translates well to role-play and the dramatic action. Primarily, she recommends the implementation of group therapy to support the attachment transition teenagers are making towards peer relationships, as well as the use of role-play to help their crucial work exploring shifting roles as they move towards adult life (Emunah, 1995). Although Emunah (1995) does not write specifically about the use of *mirroring* with this age group, she does write extensively about the importance of the group members verbally reflecting one another's feelings during role play, as well as the benefits of role reversal. As we have previously established, mirroring and self-witnessing are inherently involved in these aspects of drama therapy (Jennings, 2011; Moore, 2006), and Emunah (1995) describes their benefit in heightening group cohesion, developing empathy, increasing self-regulatory skills, and supporting self-knowing in teenagers, all of which are developmentally appropriate attachment-related outcomes.

Weber and Haen's (2016) work observing the therapeutic relationship with insecurely attached adolescent clients also hopes for the ultimate goal of healthy self-regulation in the adolescent client. Weber and Haen (2016) focus primarily on the support the core process of *dramatic distancing* can offer to therapy with adolescents. Again, although they do not speak of mirroring in particular, their recommendation is founded on principles of attunement, wherein a therapist attunes to the adolescent's expressions of distance and closeness, and replicates the process of a caregiver attuning to the approach and distancing of their infant (Weber & Haen, 2016). They observed in their work that this allowed the adolescent the opportunity to move from co-regulation in the therapeutic relationship to self-regulation in their daily lives, making progress in their developmentally appropriate attachment goals of individuation (Weber & Haen, 2016). Versaci's (2016) concept of the dramatic action as creating the holding environment for young children and infants has themes that can also be seen in Weber and Haen's (2016) work. Rather than focusing on facilitating the holding environment between infant and caregiver as a part of a nurturance connection, Weber and Haen (2016) offer the mirroring process that is inherent in the holding environment as a basis for creating a therapeutic alliance between adolescent and therapist with the aim of healthy identity formation and individuation. This is

similar to statements Emunah (1995) makes about the emotional container that the dramatic action offers teenagers as they learn to regulate their emotional world, though Emunah's (1995) work speaks more to the teenager's relationship to the dramatic reality than the teenager's relationship to the therapist.

Overall, the markers of adolescence, such as social sensitivity, rebellion, and acting-out, can act as strengths in the context of group drama therapy, and the holding environment of the dramatic action can act as a regulating experience (Emunah, 1995; Weber & Haen, 2016). The network of peer-mirroring in group drama therapy is greatly in sync with teenage attachment needs, as is the reparative experience available in an attuned relationship with a therapist wherein it is safe for the adolescent to approach and retreat in the process of individuation (Emunah, 1995; Weber & Haen, 2016).

Mirroring in Adulthood. (*In which we find hope.*)

Space between the legs, standing.
 Space, always
 between one & the other thigh, between one rib & another,
 between the twist of muscles,
 between the two adult bones of the leg

The spaces we don't see, inside us
 when we ride the way we came at dusk
 on unlit bicycles, lunging our legs on the grey pedals,
 thinking of the brakes,
 will they work in the dark, wet distance
 - Erin Mouré (1985), excerpt from *Riding Blind* (p. 66).

While our attachment experience in adulthood is heavily informed by our experiences of nurturance throughout childhood (Bowlby, 1963; Lopez, 2009), our attachment needs, goals for attachment bonds, and sources of attachment-related hormones have shifted more towards social or sexual relationships by the time we reach adulthood (Flickinger, 2019; Heard et al., 2012; Mouras et al., 2008; Rutter & Rutter, 1993; Straayer, 2020). Several attachment theorists have attempted to adapt Bowlby's (1973, 1980, 1982) original concepts of attachment to the adult experience (Shaver & Mikulincer, 2009). Heard et al., (2012) propose that the transformation to adult attachment necessitates a restructuring of the attachment paradigm in order to respond adequately to adults' attachment concerns. Their model focuses largely on addressing the new attachment roles that emerge in adulthood in response to the attachment system being activated across various platonic and sexual social contexts (Heard et al., 2012). I connect these emergent roles to changes in the directionality of care in adult connections. As opposed to the

unidirectionality of care in adult-child nurturance relationships, adult relationships involve what Fisher and Crandell (2001) term as “complex attachment:” a reciprocal dynamic wherein each person, “can move empathically and flexibly between the dependent and depended-upon positions” (pp.18-19). This said, an important element of adult attachment is the process whereby an adult steps into the role of nurturer, taking on the task of mirroring for a child or dependent in their life. Although it is true that this is an impactful time in a human’s life and has been found to be a highly activating relationship configuration, it falls outside the scope of the research work at hand. This following portion of the research will specifically examine attachment relationships between adults, rather than the adult perspective of adult-child relationships. It is important to note that the following research and discussion is made in a North American cultural context, which has certainly had an impact on the ways I as the researcher have gathered and analyzed the data. Of particular note are Traina’s (2011) observations that adult independence, individuation, and attachment in a North American context are socially evaluated by an individual’s engagement in a romantic dyad during their adult life. I say “North American” here to indicate Euro-centric settler cultures, not cultures Indigenous to Turtle Island. Colonial North American culture generally places high value on romantic dyads, and there is a social norm of assessing a person as successful in their adult attachments and adult individuation if they have achieved a longstanding romantic dyad (Traina, 2011). This differs from trends in collectivist societies which assess adult success in independence and individuation by an individual’s capacity to support their aging parents and family unit in the long term; that is, the individual’s capacity to take on caretaker and provider roles for older generations in the family unit (Traina, 2011). In light of the current context, this writing has a particular emphasis on attachment in romantic and sexual adult attachment relationships, which is inextricable from my socialization as a settler in North America. Traina’s (2011) work particularly acknowledges the importance of touch across the lifespan at various stages of development, and she writes extensively about the wide variations of perceptions of touch across cultures and gender. Although this differs from the research at hand, with its emphasis on mirroring in attachment, both Traina’s (2011) work and this research share the common understanding of attachment as an embodied, kinesthetic experience, and her writings observe touch as a primary vehicle for attachment, attunement, and mirroring processes. Traina (2011) observes that this North American focus on dyadic romance creates a self-fulfilling cycle, wherein behaviours, such as touch, that contribute to building attachment, are more likely to be

perceived as romantic or sexual advances and create a society wherein romantic and sexual touch and attachment are often the only socially acceptable avenues by which adults are able to meet their basic needs for touch and attunement. Given this, working with attachment between adults in a North American context necessarily involves working with sexual and romantic relationships, and the pursuit of mirroring interventions for adults must therefore respond to these attachment experiences. Furthermore, perhaps due to this North American cultural bias, the literature available on adult attachment has a strong tendency to approach attachment from a lens of romantic relationships.

In response to these trends in the literature, as well as the significance of the material, throughout the following I will make connections across the literature regarding mirror neuronal activity, sexuality, and adult attachment, which have been observed both quantitatively and qualitatively (Feeney & Noller, 2004). In these connections there is an emerging understanding of the ways adult attachment and sexual identity develop in relation to mirroring and how we might apply these understandings to the therapeutic setting. Although we may not, as yet, have comprehensive diagrams depicting the precise areas of the brain responsible for adult attachment in sexual relationships, it is possible that, as with most other areas of human consciousness, an attempt at a simple explanation of this human experience betrays us, or misunderstands the point, entirely. As described previously, attachment is a holistic experience of the social body-mind, including numerous complexly connected neurological, biological, behavioural, and relational systems. I hope to draw attention to some portion of these systems as they may enlighten the application of drama therapeutic mirroring in adult attachment therapies, though any claim to untangle the entire wonderful mystery should be considered suspect.

In light of the fact that adult attachment work implicates the examination of adult sexuality (Feeney & Noller, 2004), I would like to pre-emptively state that I am *not* suggesting a drama therapist should attempt to enter into a realm of sexual connection or sexual mirroring with a client. This would be a violation of the therapeutic contract that has been thoroughly acknowledged to damage client wellness (Feldman-Summers & Jones, 1984). It is possible that the literature may, however, imply that the professional skills of sex workers have a value in attachment work that the field of mental health in general has not offered its due. This is for further examination and will be addressed in the discussion portion of this paper. For now, let us parse some foundational aspects of mirroring in adult sexuality apart from the general experience

of mirroring during adulthood before attempting to reunite them in the formulation of treatment plans that may benefit adult attachment outcomes.

In an effort to more fully understand the relationship between mirror neuronal processes and sexual arousal, Mouras et al., (2008) examined the connection between the mirror neuron system and the autonomic response of penile erection in heterosexual men. When showing the research participants erotic video clips, they found that they could predict the intensity of penile erection based on the degree of mirror neuronal activity in the brain, with higher mirror neuronal activity corresponding to a fuller erection. That this study was conducted using video clips focuses the mirror neuron response on the aspect of witnessing, and its measurement of an autonomic response such as penile erection furthers the understanding of mirror neuron activation as being involuntary. These findings can be counterposed with Straayer's (2020) findings on the involvement of mirror neurons and motor neural stimulation as a part of the "phantom penis" experience in trans male sexual embodiment. Although he includes numerous findings on the phantom penis experience of cis male amputees, as well as the phantom limb experience in general, Straayer (2020)'s focus is on the trans experience, in which his, "consideration of trans phantom penises foregrounds presence, function, and desire" (p. 252), and values the very tangible aliveness at the core of the phantom experience. His analysis shows that stimuli related to the activation of the mirror neuron system trigger erectile action in the phantom penis and that this erectile activity has tangible, sensate pleasure for those who experience it (Straayer, 2020). For the context of this research, I will focus on the information this offers about the mirror neuronal system's role in arousal. While Mouras et al. (2008) discuss the correlation between mirror neurons and erotic visual stimuli, their work does not necessarily indicate that *mirroring* is a factor in arousal. Straayer's (2020) work expands on this, identifying that both trans and cis men who are exposed to videos of naked cis men experience what Gallese and Ebisch (2013, as cited in Straayer, 2020) term *embodied simulation*, wherein, "visual imagery is equivalent to simulating an actual visual experience, and motor imagery is equivalent to simulating an actual motor experience," (Gallese, 2011, p. 64, as cited in Straayer, 2020). (This topic was previously described in this literature review.) In these findings, neurological stimulation activates relevant muscles in the watcher's body, although the watcher remains stationary (Straayer, 2020). This is to say, by the grace of the mirror neuronal and motor systems of the men watching the recordings, they move through a vicarious experience of that which the men in the recordings are enacting. In an incisive summary of how mirroring may influence the

formation of sexual identity, Straayer (2020) states that “[t]he trans man deliberately harnesses this mirroring apparatus, not for biology-based brotherhood, but for corporeal masculinization, which in his case is self-realization” (p. 274).

Langer (2016) also writes about the ways the trans experience can teach us about the function mirroring has in adult identity and attachment, examining the impacts on trans adults in the aftermath of misattuned mirroring from nurturance attachment figures. He finds that the consequences are often long-term shame recovery and difficulty with interoception, both of which, it is notable, are intrapersonal aspects of selfhood that other theorists have connected to attachment (DeYoung, 2015; Langer, 2016; Lewis, 1988). Langer (2016) discusses the learned mechanism of dissociation that many trans adults developed during childhood in order to survive the trauma of their gender being badly mirrored to them. As previously discussed, relational attachment processes and the mirror neuronal systems are automatic and involuntary; therefore, trans children, particularly in early childhood, cannot consciously filter between congruent and incongruent information as they integrate their caregiver’s gaze into their sense of self (Langer, 2016). This may include the incorporation of shaming reactions from caregivers as well as the incorporation of gendered information that is not a true fit for the child (Langer, 2016). Langer (2016) finds that it is the impact of the dissociative survival mechanism that disrupts the adult’s capacity for interoception: a sense meant for gathering information about one’s own physiological cues and emotional world. Additionally, interoception works in concert with proprioception to support coordination and movement through space. Langer (2016) discusses his clinical experience witnessing clients recover their physical coordination and confidence as they progress through hormone replacement therapies and gender-affirming surgeries. He supposes that their interoceptive-proprioceptive experience becomes less disorganized, and their experience of shame is lessened as their inner self becomes aligned with the self that is being mirrored by their outer world (Langer, 2016).

In his work connecting attachment and drama therapy as observed in queer adult relationships, Flickinger (2019) also finds that social settings can have an impact on both identity and attachment style. He describes that queer adults whose experiences of attachment have been impacted by queerphobia in their social and nurturance relationships are observed to have higher levels of shame, lower self-esteem, and more insecurity in their adult attachment relationships (Wells and Hansen, 2003, as cited in Flickinger, 2019). This aligns with Closs’ (2010) doctoral work examining the impacts of systemic oppression on attachment in young queer African

American adults between the ages of 18 and 24. Notably, she identifies systemic oppression not only as actively negative feedback from society but as the lack of queer relationship representation and role models that queer youth experience (Closs, 2010). This is to say, the lack of mirroring in their social settings. Closs (2010) also observed that a lack of identity integration resulting from homonegativity had an impact on security in intimate relationships, though the majority of the participants in her work both exhibited and reported that they had managed to integrate a positive self-view of their queerness, and thereby had corresponding security in their intimate relationships.

The literature seems to indicate that queerness has a lot to teach us about mirroring in adulthood. My intuitive understanding is that this stems from the wider margin of difference between the experiences of mirroring in childhood versus adulthood for many queer people. Most powerfully I am struck by the thread of agency that connects these research works, in that queer adults are consistently returning to the human need for an attuned mirror and discovering how to bring it into their lives. This offers hope for the reparative effect of an attuned experience of developmentally-specific mirroring in adulthood in the face of a wide body of work that also shows there are indeed certain age-markers after which point neuroplasticity becomes less flexible and certain attachment interventions become less effective. I see this as a testament to what Landreth (2023) describes as a person's inherent drive towards self-determination.

Applying the Principles of Mirroring in Therapies for Adults

While there is a strong basis in qualitative literature indicating drama therapy is an effective attachment therapy, Feniger-Schaal, Lotan, Koren-Karie, and associates (Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022) can be cited as the first to create a quantitative measurement of attachment using drama therapy, which they call the Mirror Game Scale (MGS). Like Jennings' (2011) NDP theory and EPR paradigm, the MGS is founded on the basic understanding of attachment as a bodily experience. Through the embodied experience, Feniger-Schaal, Koren-Karie, and their associates (2018; 2022) developed a method to connect quantitative data on attachment patterns to the drama therapeutic intervention of the mirror game, resulting in the creation of the MGS. This process is cited as the first of its kind (Feniger-Schaal et al., 2018), though the method of analysis was influenced by the work of Noy, Dekel, and Alon (2011) who had previously established that the mirror game can be observed quantitatively. Noy et al., (2011) observed dyads in the mirror game and analyzed velocity, confidence of motion, and synchronicity, finding that expert movers

consistently showed higher precision and complexity when they moved with no designated leader, as opposed to a leader and a follower. The data revealed a skill in synchronized, complex changes in movement and speed that could not be accounted for by the visual processing system, alone, indicating that the togetherness involved a cognitive, predictive component. This provides a promising basis for quantitatively observing aspects of embodied imitation and joint movement, though the findings were not replicated with novice movers.

This was corrected for in the creation of the MGS, wherein dyads were made up of one expert mover (a researcher) and one novice mover (a participant) (Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022). Developing the system began with a group of 48 participants in a study aiming to validate the mirror game as a tool for assessing the embodiment of attachment in adults (Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018). Their research involved conducting the Adult Attachment Interview (AAI) and the Experience in Close Relationship (ECR) questionnaire in addition to observing the participants during the mirror game. Each mirror game session was recorded, and both gestural and postural movement were assessed in several ways. Their work in 2017 assesses the movement according to the Laban Movement Analysis and the Kestenberg Movement Profile, with the ultimate observation that those with insecure attachment patterns exhibited less dynamic and varied use of movement across the vertical, horizontal, and sagittal planes (Feniger-Schaal & Lotan, 2017). Feniger-Schaal and Lotan (2017) associate a willingness to explore a wider range of movement with the willingness to explore the world that is notably observed in children with attachment security (Ainsworth, 1978). This grows from the early understanding that there is a safe base to return to in the nurturance relationship (Feniger-Schaal & Lotan, 2017). Their work in 2018 coded the participants' movements according to 19 parameters which could be organized into the dimensions of "together" and "free" (Feniger-Schaal et al., 2018). It was found that the "free" factor was positively correlated with those whose standardized results indicated attachment security, and negatively correlated with those whose results indicated attachment insecurity and avoidance (Feniger-Schaal et al., 2018). Using the MGS, Feniger-Schaal and Koren-Karie (2022) then went on to apply these results in a clinical setting, observing four case studies, wherein these results were further verified. The case studies revealed data consistent with the 2018 research, showing that individuals scoring high in security showed freedom of movement according to the MGS, and those scoring high in insecurity showed rigidity according to the MGS (Feniger-Schaal & Koren-Karie, 2022). Using these results, Feniger-Schaal and

Koren-Karie (2022) build on the basic understanding of attachment as an embodied experience and connect drama therapy as a valid and relevant assessment tool in attachment therapies.

This series of studies has highly significant implications in the field of drama therapy. My particular interest is its potential in validating the mirror game as an empirically supported attachment-oriented intervention for adults, although the use of the mirror game as an assessment tool is a distinct difference from its use as a therapeutic intervention. When it is applied as an assessment tool, though the observable performance of the participant is of high importance, skill in performance is not a requirement for the desired data to be collected. As described earlier, this is consistent with a process-oriented approach that accepts any presentation from the client as a successful presentation; however, if gathering data is not the primary goal of a session, this raises the question of how to apply the mirror game in order to beneficially contribute to therapeutic outcomes. During the discussion portion of this paper, I will query whether a process-oriented approach rises to this endeavour.

Aside from Feniger-Schaal's and Koren-Karie's (2022) findings, attachment and drama therapeutic mirroring in adult relationships has not been widely studied (Edmiston & Juster, 2022), though the literature clearly indicates there is a basis for this research. Mirroring, both as an arts intervention and a general therapeutic principle, is consistently present in adult-oriented expressive arts therapies, though the extent to which it is articulated as having attachment benefit is largely framed by the more general therapeutic understanding of its role in the therapeutic relationship (Siegel, 2012; Yalom, 1985). This is not to diminish its impact there. It is true that the attachment within the therapeutic connection provides grounds for addressing other attachments outside of the therapeutic space (Kohut, 2009; Siegel, 2012; Sullivan Everstine & Everstine, 1989). The concept of the therapeutic relationship itself as holding therapeutic power, not only the content and modality the client is approached with, came to wider recognition with Carl Rogers' (2023/1951) client-centred approach. Many theorists and practitioners have expanded upon Rogers' approach since, including Yalom (1985) with his concept of the *here-and-now*, Stern (2004) with his concept of *the present moment* and Hill (2014) with her concept of *immediacy*. These practitioners brought foundational observations to the field about the power and benefit of the therapeutic relationship, identifying that the relationship itself has therapeutic power, regardless of the content of the session, and that mirroring affect and posture in session can strengthen access to the relationship itself (Hill, 2014; Rogers, 2023/1951; Stern, 2004; Yalom, 1985). This intentional engagement with the relational aspects of therapy is inherently

connected with the client's attachment experience and is recognized to be healing in and of itself (Hill, 2014; Yalom, 1985). Kohut (2009) offers that the primary role of the therapist for adult clients is to provide mirroring that fulfills the client's unmet needs of infancy, while Langer (2016) emphasizes that the therapist must act as a mirror for trans clients that provides a more accurate reflection of their gender than they received in childhood.

My hope is that this principle can be expanded upon and that drama therapeutic mirroring can move adult therapies beyond meta-analysis and towards experiential attachment healing work. Perhaps the dramatic reality created by the parameters of the mirror game maintains the necessary boundaries and healthy limits of the therapeutic relationship while also addressing attachment wounding in and of itself, for the sake of itself, as is the case in attachment-oriented interventions for children and adolescents. This experience-based approach to working with children and adolescents is certainly helpful, if not crucial (Landreth, 2023), but many individuals do not have access to therapy until adulthood, by which time the field as a whole has shifted focus away from experience-based approaches in attachment work.

Chapter 3: Discussion; *Diffraction.* (In which things get a lil sexy.)

Not a story about me through their eyes then. Find the beginning, the slight silver key to unlock it, to dig it out.

Here then is a maze to begin, be in.

- Michael Ondaatje (2008), excerpt from *The Collected Works of Billy the Kid* (p.17).

Like Ondaatje's (2008) lines above, these final words hope to climb inside our knowing of ourselves and make a path to and from that is truer to who we are and what we need in attachment and identity healing. In this, I will offer prompts and proposals for professionals in the fields of expressive arts therapies and neuroscience to carry forward into their work with adult clients. Though my proposals focus on the application of the mirror game, let this be an invitation to us all to engage with the natural functions of our attachment and identity formation and to maximize the benefit of expressive arts interventions that have these natural human functions woven into their fabric. Although intervening in attachment formation early on in life is undoubtedly potent and can have life-long benefit and influence on long-term outcomes, it is often that individuals do not have access to therapy until adulthood, by which time they are addressing their attachment healing retroactively. Might it be that this "retroactive" tense confounds the process? It seems to me that the process necessitates an *active* engagement in one's current attachment experience. Why is it that we, adults, who have such power in the helping professions, who are also clients and are engaged in the endeavour of self-healing work,

have neglected ourselves? We know that we are working on attachment wounds sustained in early life, but we have neglected to appropriately translate and transform our understandings of the basic functions of attachment to suit our adult experiences (Heard et al., 2012). In their work to develop a new paradigm for adult attachment therapies, Heard and Lake (Heard et al., 2012) emphasize the importance of a “whole person” approach to adult attachment (p. 18), which incorporates nonverbal signals and body language. Perry and Pate (1994) affirm that “talking cannot translate into changes in the midbrain or the brainstem, the very areas that mediate a range of physiological, hyperactivity, behavioural impulsivity, hypervigilance, anxiety, emotional ability and sleep problems” (pp. 7, 19, as cited in Miller & Torkington, 2021). Meanwhile, Siegel (2012) describes the essence of the therapeutic relationship as a space wherein, “[a] therapist and a patient enter into a resonance of states of mind, which allows for the creation of a co-regulating dyadic system” (pp. 333-334). Although Dan Siegel’s work in *Interpersonal Neurobiology* is enacted through talk therapy, the basis of this conception of therapy is, “the direct resonance between the primary emotional, psychobiological state of the patient and that of the therapist” (p. 334), wherein the embodied, nonverbal aspects of therapy form the crucible for true change (Siegel, 2012). Despite this, as a field we persist in talk-based meta-analysis, which, although certainly powerful, has its observed limitations. What has prompted us to become so disengaged from our animal, embodied experience, and to prioritize cognition and meta-analysis, which we know to be limited access points to the attachment processes?

With the acknowledgement of attachment patterns playing out in adult relationships alongside the acknowledgment that mirroring behaviours and mirror neurons are engaged in a variety of adult relationships, including social, romantic, sexual, platonic, and therapeutic connections (Heard et al., 2012), it goes to follow that there is benefit to engaging with drama therapeutic mirroring in the pursuit of therapeutic goals related to these relationship configurations. I offer that incorporating drama therapeutic mirroring into these attachment goals would be a benefit to the formulation of future treatment plans across modalities. As attachment therapies incorporating mirroring have been effectively formulated preceding the discovery of mirror neurons, there is reason to trust the inclinations brought on by the kinesthetic and arts-based knowledge that creative arts approaches have gleaned over time. This said, the formulation of future treatment plans will be well supported if informed by neuroscientific research and will increase in effectiveness and complexity by virtue of deepening precision. This is particularly

important in the approach to the ethical challenges that arise in the face of treating certain adult attachment needs. For example, it would be unequivocally unethical and inappropriate for a drama therapist to participate in sexual mirroring behaviours with a client who was addressing attachment challenges in sexual dynamics. That said, attachment bonding and attachment patterns are generally correlated to patterns of sexual engagement (Feeney & Noller, 2004), and the literature seems to indicate that mirroring is an element of forming sexual connection (Fonagy, 2008; Mouras et al., 2008; Straayer, 2020). These topics are certainly present in sex therapy, both implicitly and explicitly. How to reconcile this? If we remain in a territory of less ethical contention, we might remember that Fonagy (2008) describes sexual development as being supported by non-sexual attachment experiences. It is these non-sexual experiences whereby a person learns a basic sense of security with self and other, which in turn supports one's capacity and willingness to explore the unknowns of sexuality (Fonagy, 2008; Harnden, 2014). I draw a parallel here to Mary Ainsworth's (1978) observations of attachment security in young children, wherein she found a correlation between attachment security and the willingness to explore unknown environments. I feel this supports the value of non-sexual mirroring in the process of addressing attachment work related to sexual relationships, in keeping with numerous approaches that emphasize the healing potential of the therapeutic alliance (Hill, 2014; Rogers, 2023/1951; Siegel, 2012; Yalom, 1985). This said, as we approach the ethical challenge of sexuality in attachment, it remains that the experience of sexual mirroring has power in distinct areas of identity development and attachment formation (Feeney & Noller, 2004; Fonagy, 2008; Traina, 2011). If it were not so powerful, perhaps this issue would not be so contentious. I volunteer neuroscience and drama therapy as complementary allies in navigating these delicate inner workings of adult attachment and finding safe, ethical solutions for the use of mirroring in session as well as in exercises to explore outside of session.

Each of the prompts included below is informed by the literature available on mirroring in drama therapy as well as neuronally. Please note that the ideas outlined below have not been tested nor examined in clinical nor controlled environments. These are simply propositions for future research based on the available literature and observations in clinical settings. This is by no means a manual for attachment-oriented interventions.

Implications

Applying the Mirror Game Therapeutically

I hope that the literature speaks for itself in the numerous, rich applications that the general principles of mirroring have in therapeutic settings, as well as in the value of the various adaptations that mirroring has undergone to support interventions and processes across the expressive arts therapies. Given this, for the sake of clarity, I will focus here on the specific application of the mirror game as it is described by Boal (2002).

As I described earlier, my experience applying the mirror game in therapeutic settings has primarily focused on facilitating group cohesion, as well as offering the intervention as a point of entrance for the client to access their relational experience. This has often involved a group splitting into dyads to participate in the exercise and then returning to the group context to process the experience verbally. Although this application of the mirror game may incorporate the beneficial state of interhemispheric resonance that Siegel (2012) describes, wherein the right- and left-brain ways of connecting are both engaged, I am somehow unsatisfied. I observe that the mirror game is most often introduced as a stand-alone warm-up. Although the benefits of the warm-up may carry through the session, the texts I have reviewed tell me that this intervention merits more time in session, or more frequency over the course of sessions. Frankly, one reason that I suppose the mirror game is not often given this focus throughout treatment is its simplicity. It is a surprisingly simple exercise, and it begs the question, “What now?”

As I mentioned, my most common experiences of the mirror game in therapy de-emphasize quality of performance. This is an important part of creating a fail-proof therapy space, though it makes it difficult to distinguish the difference between an intervention that is offering benefit and an assessment which lacks the goal of offering benefit, and which is meant only to gather data about a person’s current state. In accordance with attachment literature on the cumulative effect of a positive mirroring experience, my feeling is that the repetition offers benefits to attachment and identity work, in and of itself. This aligns with client reports, both in expressive arts literature and in my clinical experience, of increased feelings of cohesion and higher capacity for self-regulation in the aftermath of the mirror game (Berrol, 2006; Erfer & Ziv, 2006), both of which are attachment-related outcomes (Nelson & Guyer, 2011; Stolorow, 2013; Weber & Haen, 2016).

This then brings the consideration of the quality of the mirroring experience into the foreground. As has been found, an important factor of benefitting from mirroring in our

relationships is receiving a good-enough mirroring experience from the other. How, then, do we reconcile this with a de-emphasis on skill in performance? Is it enough to offer the prompt, as is usual with the mirror game, of imitating one another as closely as possible, until the point that the leader is no longer distinguishable? This, in itself, implies that a commitment to the other is expected, and it creates an understanding among participants that each of them is trying their best to meet their partner with high-quality attunement. It states that each of them is working to be *good-enough* for the other. Particulars of participant personalities, including participants interpreting one another's effort as poor, then become the therapeutic material for the group (Yalom, 1985).

Although I have mentioned several times that the de-emphasis on skill in performance is an important facet of applying the intervention, it remains that the observable outward expression of the mirror game is rich with information that the therapist is likely to gain from considering. The therapist cannot truly see the inner world of the client and relies on the aspects of the client that they are capable of perceiving. Further, the development of the Mirror Game Scale (MGS) demonstrates that significant information about adult attachment is available in the outward physical expression of the mirror game (Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022). In all of this, despite the importance of de-emphasizing performance quality, the qualities of the performance are tantamount to forming an understanding of the participants. In this line of thought, I offer that the data observed during the mirror game could support the formulation of treatment plans and indicate growth points to be addressed by the mirror game as well as other attachment-oriented interventions.

This said, a major differing factor between the MGS and the application of the mirror game in session is that the MGS was developed by participants mirroring with designated researchers in order to control for confounding variables, rather than mirroring with other participants. In a group therapy session, mirroring between group members is likely to be influenced by the intersubjective field in ways that are less possible to control for (Orange, 1993; Stolorow, 2013). Although the therapist will learn a lot about the relational chemistries between group members, it would not be appropriate to devise individual treatment plans for each person according to their responses to others, especially given the context of group therapy. That is, in group therapy, although members of a group will have individual therapeutic goals, the therapist approaches the group as a collective with the aim for the group itself to become its own therapeutic agent, wherein a system of interpersonal support emerges based on the network of

dynamics between group members (Yalom, 1985). With this in mind, I would infer that the natural responses that members have to one another in various pairings of the mirror game would be likely to reflect the relational chemistries already present in the group, and addressing these chemistries in the container of the mirror game would be likely to strengthen the formation of this interpersonal network of support. In this, I return to the proposal of applying the mirror game repeatedly over the course of therapy, perhaps as a part of the group's routine during sessions. This would include de-emphasizing quality of performance and emphasizing the value of effort, as well as encouraging clinicians to closely observe participants' physical engagement with the exercise.

Though this may satisfy the query, I would like to push it further.

While what I have written above could be a constructive, process-oriented application of the mirror game in group drama therapy, I am curious about the possible benefit of shifting to a goal-directed application of the mirror game, as informed by cognitive-behavioural or neurobiological approaches such as Cognitive Behaviour Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) therapy. One of the basic principles of EMDR is its capacity to aid in the reconsolidation, integration, and reprocessing of traumatic memories by way of bilateral stimulation during contained exposure to the memories (Shapiro, 2017). This is to say, engaging with the body in specific physiological ways such as eye movement or tapping on the body so as to stimulate targeted brain functions across both hemispheres with the goal of reducing PTSD symptoms. As an exposure therapy, EMDR is, of course, much more complex than simply flicking one's eyes back and forth, but for the sake of this moment, let us focus on the directness of this principle of bilateral stimulation: the body is used as the access point to these functions of the brain. The specifics of how this access is harnessed has to do with the context of the memory at hand and the ways the memory is being engaged in the therapeutic space (Shapiro, 2017). Bilateral stimulation is not an automatic avenue to PTSD recovery; rather, it is one tool in the process that is considered valuable because it does the work of engaging with particular neurological functions. This brings to mind the simple fact that drama therapeutic active witnessing and mirroring engage the mirror neuron system by way of the body. If we follow the basic model of EMDR, it is tempting to infer that we might be able to harness this access to mirror neuronal processes for the benefit of attachment outcomes in adults. Could we? Similarly to bilateral stimulation, engaging the mirror neuron system is not likely to be sufficient in and of itself; our mirror neurons are firing constantly throughout our lives for a multitude of

reasons. As in EMDR, the context of the neural function becomes important. It occurs to me that the dramatic action of the mirror game brings with it its own sort of context by offering a significant amount of kinesthetic and social information. Does the client's personal attachment pattern provide the remaining context necessary? Would the proximity involved in playing the mirror game trigger the client's attachment system in the appropriate ways? Could this act as a kind of exposure therapy for attachment distress?

On another hand, if we were to model our approach after Cognitive Behaviour Therapy (CBT), an interesting tenet to pull from is that of behavioural change, which is connected to the understanding that behavioural obstacles maintain psychological distress (Beck, 2020). This approach emphasizes behavioural change as a tool in shifting emotional and psychological experiences. For the sake of this argument, let us view the mirror game as a set of behaviours, with the understanding that this set of behaviours has been empirically observed in the MGS to accurately reflect a client's degree of attachment security (Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022). Further, the MGS has codified the specific factors of movement that reflect attachment security. Following a behavioural approach, does it not seem logical that encouraging participants to enact the mirror game in such a way that reflects the physical presentation of attachment security would reduce attachment-related psychological distress? Insofar as I see, the implications of this for couples drama therapy would be significant. Given that the experiences of attachment patterns and wounding are so often primary to the therapeutic material in couples therapy, and the therapy is being carried out between people who are primary attachment figures for one another, it seems intuitive to apply interventions that specifically access the attachment experience.

Regardless of the potential in each of these thought experiments, we run up against areas in need of further research through multidisciplinary research settings. There are also many considerations to account for when responding to the various possible configurations of the mirror game. The application of the mirror game in couples therapy is intuitive, particularly in this Euro-centric North American context where romantic dyads are so highly valued (Traina, 2011). This said, its applications in individual and group therapy are also informed by important adult attachment goals for reparative mirroring experiences and social attachment bonds (Heard et al., 2012; Langer, 2016; Rutter & Rutter, 1993; Siegel, 2012). Earlier we addressed the network of support the mirror game could facilitate in group contexts, so I will focus here on the conundrum of individual therapy.

In individual drama therapy, the mirror game could take place between therapist and client, as it would in the above proposal for an EMDR-inspired approach. It could also be assigned as homework for a client to complete with a person in their life, to be discussed in therapy afterwards. It could also be that the client views recordings of themselves or significant others performing the mirroring exercise, or perhaps the client mirrors the recordings in session. Each of these configurations is likely to interact uniquely with the client's specific attachment needs and goals. For example, the experience of participating with one's therapist could be overwhelming and highly vulnerable for a person who struggles with avoidant attachment, while another client who struggles with body image or gender dysphoria may find it intolerable to witness recordings of themselves. In its simplest configuration, wherein the mirror game takes place between client and therapist, the phenomena of transference and countertransference must be acknowledged. Often transference and countertransference have a certain stigma and fear around them, although they are widely recognized in the field as elements of the therapeutic relationship. Although they can be intense experiences for both client and therapist, they can also hold valuable information about the client's way of engaging in relationships outside of the therapeutic space (Tolmacz, 2009). If held with professionalism and compassion, transference can be a fertile ground for the client's self-growth, particularly because it brings the outside world into the therapeutic experience (Yalom, 1985). Transference occurs for many reasons, including as an expression of attachment needs or attachment wounds that the client is navigating in their life outside of therapy, and therefore in session (Gelso et al., 2013; Tolmacz, 2009). The likelihood seems high, that participating in an attachment-activating exercise such as the mirror game will increase feelings related to transference. Transference and immediacy can be highly challenging aspects of therapy, particularly for those with attachment trauma (Gelso et al., 2013; Sullivan Everstine & Everstine, 1989). For example, an adult client who survived sexual abuse during childhood may experience the therapist as the parent who neglected to save them from the abuse, or as their abuser (Sullivan Everstine & Everstine, 1989). Although neither of these are pleasant experiences of transference, they offer a powerful opportunity for a reparative experience (Sullivan Everstine & Everstine, 1989; Yalom, 1985). Given this, reducing the stigma around transference and inviting the client into an awareness of this way of working would be important parts of informed consent to the intervention (Gelso et al., 2013).

Future Considerations

As has been previously established, the techniques of drama therapeutic mirroring, and of the expressive arts in general, have inherent connections with the functions of attachment, and it is, therefore, less crucial that future research in this area focuses on whether or not the expressive arts therapies are relevant. Rather, future research can support the bridge between these functions and expressive arts techniques in order to continue developing praxis in arts therapies that embraces their full potential to benefit prognoses originating in attachment wounding.

An area of research that I think would offer a high degree of benefit to the formation of mirroring interventions is that of the formation of sexual identity and how this connects to experiences in romantic and sexual relationships. During this research, I found myself often wondering what it is about romantic and sexual relationships that is so activating for adults, and why it is that they become primary attachment relationships (Fern, 2020; Fisher & Crandell, 2001). I often return to Peter Fonagy's (2008) work in psychosexuality, particularly his statements about the necessity of mirroring in order to integrate personality, and the impossibility of a congruent sexual mirroring experience with caregivers. Fonagy's (2008) conclusions are primarily focused on explaining how intensely overwhelming the experience of human sexuality can be. He associates the drive of libido with the drive to integrate the sexual self into our personality and offers this as an explanation for the observed human tendency to lose sexual desire in long-term relationships; that is, the part of the sexuality that one has explored with their partner has become integrated, and there is a drive to incorporate new parts with new people (Fonagy, 2008). It occurs to me that, since the process of identity formation is a part of the attachment process in our nurturance relationships, does it not follow that the development of our sexual identity through sexual and romantic mirroring with our partners could undergo similar attachment processes? Might it be possible that the parts of our identity, and therefore, our attachment, that are connected to sexuality, live in a certain kind of infancy until we are developmentally ready to integrate them through the process of sexual maturity? Could this be part of why sexual and romantic partnerships can be so activating, and have the capacity to become primary attachments?

Though the emergence and actualization of sexual identity are continual and in process over the course of the lifespan (Fonagy, 2008), I feel the period of adolescence may teach us something about sexual attachment experiences, overall. It has been referred to across multiple modalities and theoretical frameworks that a teenager's state of mind is similar to that of a

toddler during individuation (Blos, 1962, 1968; Emunah, 1995; Esman, 1980; Gessell, 2011; Rutter & Rutter, 1993). I wonder if this stretches to sexuality, or if the emergence of biological sexual maturity in tandem with the unintegrated sexual self can offer any explanation to these developmental parallels. If it is true, that these parts of our mind or identity are in a state of immaturity that reminisces early life, might not their development in relation to our sexual and romantic partners lend themselves to forming strong attachments similar to early life? Might not this inform our understanding of the degree of nervous system activation incited by romantic and sexual connections? Although a review of quantitative literature would certainly be informative, it is also intuitive for most humans to recognize that their romantic partners become primary attachment figures (Fern, 2020; Levine & Heller, 2010). I do not intend this to imply or subscribe to any prosaic, traditionalist elision of “true love” and sex, nor do I mean for it to advocate for codependency in romantic relationships; I am only wondering if this chemistry between identity formation and sexual mirroring merits further research so that we can find out how to harness these understandings to shape embodied attachment therapies for adults.

As I mentioned earlier, it would be counter-therapeutic for a therapist to engage in erotic mirroring with a client. This said, it remains true that erotic mirroring is an important part of identity and attachment formation (Fonagy, 2008). It also remains true that the field as a whole needs dyadic, interactive approaches to the experiences of sexuality and sex, which are so often social processes (DeLamater & Shibley Hyde, 2004; McCarthy et al., 2004). While a drama therapist is not situated to venture into this territory with a client, a deeper understanding of the role of erotic mirroring could inform how therapists guide both monogamous and polyamorous clients. For example, this could include inviting more intentionality to the ways romantic and sexual partners mirror one another’s erotic selves or offering attachment-informed exercises for clients to explore with their partners outside of therapy. Fonagy’s (2008) concept of libido as a drive towards actualization through sexual identity lends itself well to relationship therapies oriented to polyamorous clients and could support monogamous clients in widening their explorations with their current partner. This would expand on foundations laid by early theorists and practitioners of sex therapy and address the disconnect between the practices of sex therapy and couples therapy (McCarthy et al., 2004). Numerous quantitative correlations between attachment and sexuality have been observed (Feeney & Noller, 2004), despite resistance to the relatedness of these systems on the part of psychoanalytic traditionalists (Eagle, 2007). Where sex therapy has historically focussed on individually treating sexual dysfunction and couples

therapy has historically been designed to address attachment without explicitly connecting to sexuality (McCarthy et al., 2004), erotic mirroring offers an avenue for incorporating these related processes with one another.

As we face the differences and similarities between the roles of sexual and non-sexual mirroring, further questions arise. For those who have had inadequate mirroring experiences throughout childhood, what might be the impact of experiencing mutually satisfying mirroring upon reaching sexual development? How might this impact the development of sexual identity? And, in keeping with Winnicott's (1957) thoughts on the importance of integration of sexuality with personality, is it possible to experience mutually satisfying sexual mirroring if a person has not been given adequate non-sexual mirroring experiences throughout childhood to support the overarching actualization of their personality? Although the answers to these questions may not be clear, the asking of them invites us to approach research on sexuality, identity, and attachment with an integration of the platonic and the erotic. Further research on the mental health benefits of sexual mirroring in attachment healing could inspire holistic approaches to sex therapy and couples therapy, calling on the skills of sex workers as collaborators in the therapeutic process. These professionals' skills in negotiating sexuality within bounded relationships could support the development of mirroring interventions that sex workers, kink professionals, and sex educators coach romantic partners through or facilitate directly according to clients' needs. This approaches sex work, kink, and sexual role-play as technologies to be foregrounded in the field of mental health, rather than as marginalized luxuries. The implications of this research could be extensive, including the benefit of this work to survivors of sexual trauma and developmental attachment trauma.

Limitations

This writing was conducted as non-participant, theoretical research and the conclusions herein are therefore hypothetical, requiring further support through participant-based research studies. It is also important to note that these statements and the literature they are founded on exclude individuals who identify on the asexual and aromantic spectrums. It would be a further benefit to commit research to the adult attachment processes of these individuals, and how their asexual and aromantic identities have informed their experiences in adult attachment relationships.

Furthermore, this work does not specifically review the developmental social experiences of ADHD nor Autistic individuals, neither does it review other types of neurodiversity, apart

from observing the neurodivergence that results from attachment trauma or neglect in early nurturance relationships. Despite these limitations, it remains true that attuned nurturance relationships between children and their caregivers require attention that is unique to each child, and that this may be said of nurturance alliances with neurodivergent children as well as neurotypical children. Although the particulars of touch, eye contact, verbiage, and overall embodied experience may generally differ between neurodivergent and neurotypical children, an attuned, respectful caregiving experience is the inalienable right of every person, and the basic principles discussed in this paper must not be ignored by those considering the human needs of neurodivergent individuals.

Conclusion

It is clear in the literature that expressive arts therapies, including drama therapy, have a neuroscientifically supported basis for approaching attachment therapy with clients across various stages of development (Hass-Cohen & Findlay, 2015; Miller & Torkington, 2021). It has been found that the physiological, relational basis of attachment is well supported by physiological, relational approaches to therapy (Berrol, 2006; Hass-Cohen & Findlay, 2015; Lewis, 1988; Miller & Torkington, 2021; Orange, 1993). It has also been observed by practitioners across modalities that mirroring increases connection and cohesion in groups, strengthens the therapeutic relationship, and has benefits in filial therapy (Berrol, 2006; Jennings, 2011; Moore, 2006). Specifically, the intervention known as *the mirror game*, as derived from Boal's (2002) *mirrors sequence*, has been used in these pursuits, particularly by dance/movement therapists and drama therapists. The mirror game has also been found to have a direct correspondence with attachment patterns in adults. The most comprehensive research in this matter was conducted by Feniger-Schaal and associates (Feniger-Schaal & Lotan, 2017; Feniger-Schaal et al., 2018; Feniger-Schaal & Koren-Karie, 2022), though their work focuses largely on the mirror game as an objective attachment measure, rather than a therapeutic intervention.

Although this is extraordinary data with the potential to shift approaches to attachment therapies in drama therapy and therapies across the helping professions, it is still new in the scheme of attachment research and the study of mirror neurons. There has not been a wide range of work written about the use of the mirror game in attachment therapies for adults, nor have the mirror game's quantifiable therapeutic outcomes been widely observed. Given the strength of the support in the literature, these areas deserve further research work in the pursuit of interventions

that are specific to adult attachment goals and areas of the brain that are relevant to the developmental needs of the client. My strongest recommendations for future research involve the implementation of the mirror game to benefit attachment outcomes in adult relationships of various configurations, and considerations on the formation of adult sexual identity as it pertains to mirroring in sexual relationships and forming of attachment bonds. I invite the examination of multidisciplinary approaches to attachment therapies for adults, with an interest in creating experience-based attachment therapies that protect the bounds of the therapeutic relationship.

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