Smile and Fool Your Body

Tami Michelle Gatta

Drama Therapy Program

New York University

September, 2009

A thesis submitted in partial fulfillment of the

requirements for the degree of Master of Arts in Drama Therapy,

Department of Music and Performing Arts Professions

Table of Contents

Abstract

Facial expressions play an essential role in the non-verbal communication that informs standard interactions, serving as a valuable tool for social skills training in those who display non-traditional affect. Schizophrenic clients, by nature of their very diagnosis, are known to struggle with the correct attribution of emotions based on facial expressions in others and often present facial expressions that are incongruent to their own internal emotional states. This thesis presents the hypothesis that drama therapy serves an indispensable purpose in the treatment of this population by regularly incorporating exercises that involve the transparent and contained exploration of facial affect. The author presents a literature review and meta-analysis that looks at the facial feedback hypothesis, emotional contagion, and symbiotic relationship between the arts and sciences involved in the clinical drama therapeutic encounter. Ideas are further presented for capitalizing upon the natural incorporation of facial expressions manufactured in drama therapy, as suggestions are made for further quantitative research intended to appeal to a wider audience.

Acknowledgments

For all the faces I love most:

Dr. Andrea Hamilton, who walked me through this (and many another) entire process and gave me a most delicious metaphor by bookending my studies with brand new life

Kate Hurd, who gives me continued permission to play, despite the fact I so often mistake it for work

Dr. Richard Magill, who offered me the face of kindness and encouragement every step of the way

My students over the years, who kept me questioning, which of us was the teacher, after all?

My beloved clients at TOP, who so kindly schooled me, leaving me humbled by their genius—special gratitude to: DA, WO, LP, MP, HS, and BV

Eliseo Martinez (1977-2009), who taught me cooling generosity in the face of a fiery temper, all in the midst of poetic wit. How I wish you could have read this.

Mary Hershkowitz, who supplied me with an unwavering dose of groundedness during my most disconnected moments

Lucy McLellan, wizened and wicked in black curls, who extended a firm hand of friendship across a tabletop and cup of tea

Sara McMullian, mischievous and mothering, who tucked kind lessons into the batter of a sour cream cake and an invitation to join the family

Robert Landy, who kept me captivated by glimpses of a traveler's passion for life, and whose smiles were always embracing and genuine—believe me, I would know if they were fake

Maria Hodermarska, graceful and gorgeous, who startled me with visions of my own worth—there is no one in this world with whom I'd rather procrastinate

Jason Butler, steadfast and strong, who is now, as ever, a joy to adore—for all my facility with language, I still haven't found the words to express my gratitude for you

Jen Spitzer and Jacob White, who gave me Spitzophrenia, and safety in treasured memories of a stolen hour in the apple orchard

Sean Boyle and Chris Smith, who provided me with sixteen years of four-hour chats about everything and permission to edit nothing

Laura Killeen, kaloo kalay, who played the perpetual cheerleader, and faithfully held every embrace, waiting for me to exhale

C to the A to the olin to the llardyce, who taught me the delights of new adventures shared alongside a treasured little brother—I love you more than…

Silk-Anne Semiramis "Eternia" Kaya, who startles me in her loyalty, assures me of my path, and strives always towards transcendence

My cohort—the original 15—who patiently endured my pains and passions, and gave me renewed hope in the existence of friendship

The Paddock Family, who taught me the joys of quietude and a peaceful, if puttering, brow—Such lakeside love to Grandpa Joe and Mary, Marcia, Tom, Aunt Jill, Uncle Tommy, Aunt Beth, Cousin Jane, Mark and Brian. Uncle Pat, you are missed deeply

Kaylin Melnyk, who loves unconditionally and inspires with the fiery countenance of youth

My Mother, Reneé Gatta, who stands fiercely by my side, a survivor through and through, and deftly weaves tapestries of story illustrated by the most remarkable range of expression

My Father, Donald Gatta, who cannot help but govern by love, and provides daily proof of the quiet strength that exists in an unassuming yet inquisitive existence

My Megan, who has ushered me towards success these past ten years, and kept me thinking, laughing, loving and questioning no matter the struggle. Who sent you here, dear one, and how did I get so lucky?

Dedication

To my Nanny, Sylvia Israelit,
Who spent hours teaching us the face of stupidity
When folks expect too much
And the snarl of contempt
When folks expect too little
Who wears a golden 9½ around her neck as a reminder
That there is always room for improvement
Who packs 7 feet of attitude into 55 inches
Who fast approaches her 100th birthday
because G-d isn't quite prepared for the waves she'll make in heaven
Who would rule the world had she been born 5 decades later
Who told me to take my work as far as possible
To never settle
And bolsters me throughout my schooling
Even though I'm not a doctor

How I adore you

Introduction

It was years before I could smile for the camera.

My parents still tell stories of me as an infant, rolling my eyes as well meaning photographers attempted to make me laugh so as to snap that perfect shot. I had little tolerance for condescending baby talk, they said, even at a year or two old, and would only smile when the mood struck me. The same held true in my grammar school years. Old class photos reveal a series of grimaces, my teeth awkwardly bared, eyes reproachful. Intent on attaining something presentable for coveted spaces in their wallets, my parents wondered aloud at my stiff attempts, and kindly suggested I spend some time reflection gazing to correct the problem.

As an only child, I had more than my share of alone time, and passed hours in front of the mirror, studying my face and its hidden potential. Initially self-conscious of the apparent deficit, I eventually learned to isolate every muscle I could, pausing videos of Carol Burnett and Lucille Ball as I mimicked them in the full-length glass propped against my armoire. I hit junior high school and began paying attention to the way expressions made *me* feel: welcoming looks belonging to teachers and former babysitters, confident poses on celebrities and friends. Invariably, I realized the most appealing grins involved tightened muscles around the eyes—what I now know is a reflexive tensing of the *orbiculis oculi*, indicative of genuine joy, and referred to as a Duchenne smile (Ekman, 1997). I became determined to control those muscles myself, and felt triumphant as I responded powerfully to my own evolving facial expressions. I expanded my repertoire with confidence, discovering it was immediately apparent which facial expressions were desirable, because *I* found them desirable. Somehow, practicing these expressions stimulated emotions in me, a fact that I found surprising and delightful. So, while

other teens obsessed over frosted lipstick and mile-high hair, I scrutinized the details of arched eyebrows and flared nostrils.

These talents led me towards newfound intimacy and connection. I conscientiously worked to both read people quickly and match their emotional output, benefiting from an increased aptitude for shifting expressions some labeled “charisma”. It was highly calculated at the time, but it was highly high school. College carried on in much the same fashion as the little girl who spent hours practicing to smile followed me, enjoying regular appearances on stage and off.

Soon after I graduated, I began to teach. I kept my students laughing and anticipated their needs with accuracy, learning to watch the faces of my most troubled students when they thought no one was looking. In those quiet moments, I often saw genuine frustration where before there had been defiance. Brief glimpses of hurt feelings and empathy crept up on the menacing miens of bullies. I never kept these observations to myself, but gently pointed them out in private moments of calm, always with a silent prayer that I might be planting a seed for the future. These skills often left me paired up with the most challenging classes; frequently, I worked with those who had just been released from inpatient units, or were fast approaching stays on one.

In time, I made the connection between the work I wanted to do and the skill set of a drama therapist. I was a teacher, but moreover I was utilizing candor, comedy, and countenance to communicate with my pupils. As I was indulging in the performed roles of teacher and student, the faces of these characters were my guides. And as for education, my interests lay more in empowerment, insight and group dynamics than in trig, chemistry, and idiom. Soon, I was entering my first class at New York University (NYU), certain that I had chosen the correct path.

My first internship led me to the homeless mentally ill, a complex and variable population that called into question my reliance on standard cues embedded in a non-verbal give and take. I watched, a child acquiring new language, as these clients exposed me to the face of trauma in all its incarnations: flat, labile, blunt, concealed. My head swam those first months, and I grasped at any inkling of emotional revelation clearly written across the brow. Responses felt deeply disproportionate as stories of childhood abuse were illustrated by radiant smiles and reflections on friendship accompanied emphatically sour expressions. Schizophrenic clients who failed to return my grins left me with the sting of hurt feelings and wounded pride. Time and again a parallel process emerged in supervision as I held back my own emotions and tried to read the neutral visage of my supervisor for clues as to what he was seeking from me as an intern.

During this time, I reflected on my initial draw to drama therapy and the great benefit of a counseling option that offers clients an alternative means of articulation (Butler & Gatta, 2009). Here seemed the very embodiment of this potential: those whose muted lexicon was unknown to me and whose experiences were perhaps unspeakable. I witnessed personal confessions and interpretations fail, while strength lay in the aesthetic distance of metaphor, improvisation, role-play, and projective devices (Landy, 1993). Clients, with guidance, could create and explore safely, offering up clues that did not rely on literal verbalizations, but instead presented in a more nuanced manner. As an intern, I found myself eagerly attuned to this quality within the work, focusing on the performance of clients' non-verbal cues as I had once focused on those of my students. Interpersonal exchanges relied heavily on implicit communications, forcing me to look at my own silently roaring expressions and gestures. Hearkening back to my training as an actor, I looked for accurate depictions of emotion to which many of my isolated clients did not

typically adhere. I became saturated with minutiae, and noticed surprising shifts in clients' facial expressions during drama therapy sessions, while simultaneously noting my own shifting responses to their changes.

The greatest gift emerged for me as a challenge—supervision in the form of Developmental Transformations (DvT). This improvisation-based form of drama therapy encouraged a corporeal engagement that felt similar to mindfulness or stream-of-consciousness, only performed alongside a therapist committed to mutual transparency. While I grasped at instincts that had devolved to flimsy at best, the atmosphere created by what David Read Johnson (2005) deems an embodied encounter within an agreed upon *playspace* was just unstructured enough to combat my best laid plans. In time, my supervisor's firm but gentle hand led me to an awareness of my constant machinations. The perfectly executed smile, the highly structured look of interest, the carefully constructed depiction of calm—these were false parts of my own need for control. They were supported by the well-crafted vigilance I had honed, giving me the impression that I could, at any time, both supply and demand information I desired. As I learned (indeed, continue to learn) this lesson, I became able to view facial expressions with a more academic and less assumptive appreciation. Only then could I acknowledge my lifelong marriage to an inflexible *legibility of affect*—the belief that external carriage (particularly facial expressions) is clearly indicative of the internal state, thus implying the possibility of an accurate reading.

It became clear why schizophrenic clients made the most powerful impression on me. The flat affect that, according to the *Diagnostic and Statistical Manual of Mental Disorders-IV-TR*, often characterizes the disease left me confused about intent *(*American Psychiatric Association, 2000). The turned down corners of a mouth, a distant look in the eyes—solecisms in

the midst of seemingly congenial conversation—appeared to be the hallmark of the client/therapist interplay. These awkward exchanges brought to mind my own childhood interest in facial expressions—small personal and social successes that seemed a direct result of my adaptable physiognomy—and left me questioning whether schizophrenic clients suffered for their non-traditional displays of facial affect. Certainly the men and women I worked with experienced things that I was not able to read in their faces.

I learned to question the legibility of this above-the-neck affect in light of these potentialities for incongruence between the internal experience and external manifestation. Yet I imagined myself unusual in this capacity. Humans are visual creatures, deeply reliant upon the unvoiced conversations that occur through facial expression (Erskine, George, Gilooly & Stewart, 2001). Average interactions with schizophrenic individuals, I suspected, must be colored by mixed messages and muddied interpretations, seriously compromising their quality of life.

I further recollected an article that had caught my attention in college, suggesting that assuming a joyful facial expression causes a physiological experience of joy (Ekman & Levenson, 1993). The hypothesis was that facial expressions are not only indicators of emotion in the body, but also indicators *to* the body of what emotion is meant to be experienced. In addition, emotions could potentially be shifted, intensified, or abated through careful use of this finding (Ekman & Levenson, 1993). During my undergraduate studies, I thought this article extremely interesting as an actor seeking to capture the authenticity of an emotional scene. Now, as a graduate student, I wondered if this could lead to further understanding a scientific explanation behind drama therapy as an effective therapeutic intervention for schizophrenic clients.

I had long thought that drama therapy was in possession of more than a feel-good explanation, as I am frequently interested in the measurable "Why". As I sifted through variations on my own inquiries, one subject resurfaced repeatedly—is drama therapy serving a pivotal and quantifiable purpose by exercising and adding to one's range of facial expressions? If facial actions[1], even manufactured ones, create internal experiences, it follows that drama therapy, as a therapeutic modality that actively incorporates manipulation of the face, stimulates emotions in its participants. This could prove meaningful for clients struggling with any number of maladies. Feigned smiles may offer some corporeal combatant to depression. Facial indicators of sentiment might slowly dissipate emotional numbing as a result of trauma. Assuming a look of rage could physically bolster struggles to express anger. Further, it might be feasible to help clients with flattened facial affect connect emotions to corresponding facial expressions, thus improving their communication skills. Potentially, drama therapy's role in quality of life issues surrounding individuals with autism or, for the purposes of this thesis, schizophrenia, could be explained through biology's building blocks.

Only further research will prove drama therapy both exposes clients to new emotional experiences and serves as essential socio-psychological training by evoking meaningful facial expressions during treatment. This in mind, I decided to write a thesis that would serve as preparation for future studies, incorporating a thorough exploration of contemporary publications that would contribute to such endeavors. Eventually, a research question was born: How do

[1] The author will use *facial expressions* and *facial actions* interchangeably. *Facial affect* will be used to indicate the overall expressiveness of a countenance, specifically behavior or action within the face indicative of emotion.

facial expressions manifested in drama therapy stimulate an *evolution of facial affect*[2] in schizophrenic clients?

[2] The term *evolution of facial affect* will be used throughout this paper to mean the progression by which one attains and utilizes an increasing number of facial expressions congruent to one's internal experiences.

Rationale

Schizophrenic Struggles and Creative Solutions

"At every moment, the machine rejects faces that do not conform…There are only people who should be like us and whose crime it is not to be" (Deleuze & Guattari, 1980, pp. 177-178).

The very verbalization of this sentiment strikes a chord in the reader as to its elemental importance. Extensive research shows that schizophrenic clients suffer as a result of the flattened and labile affects they possess (Kring, Kerr, Smith, & Neale, 1993; Penn & Combs, 2000; Schwartz, Mastropaolo, Rosse, Mathis, and Deutsche, 2006). Deleuze and Guattari (1980) shed light on the face as a function of power dynamics and pathology—noteworthy for the schizophrenic so frequently left impotent by a slow process of disenfranchisement and isolation that comes in part from their curious presentations. Non-normative faces, those that are defined by their otherness, gain attention in a way that emphasizes the need to further understand this aspect of the schizophrenic experience. Deleuze and Guattari (1980) reflect on codified facial affect as a forcible, if punitive categorization. As they discuss gradations of affect-worth, the "faciality machine" is introduced as a set of mores placing only recognizable faces in their larger landscapes as they are systematized and stratified, leading to a hierarchy rooted in the detection of deviance (Deleuze & Guattari, 1980). Within a societal machine that not only requests but demands adherence to the accepted performance of expression, when one deviates, it can be more than noticed, it may be criminalized (Deleuze & Guattari, 1980; Abumrad & Krulwich, 2008a; October 28, 2008). Schizophrenic clients know well what is acceptable to the faciality machine, having been often located outside the mechanisms of its interlaced cogs. Like others who fail to meet wholly with grand scale approval, schizophrenic characters frequently get filtered out of the landscape or else sacrificed so as not to mar the desirable topography.

Clinicians concerned with schizophrenics' quality of life are aware that facial expressions are fundamental to interpersonal interactions, and posit that current treatment programs are lacking for training in social skills that explores nonverbal facial social cues (Keltner, Kring, and Bonanno, 1999; Schwartz et al., 2006; Falkenberg, Bartels, and Wild, 2008). Research has increasingly proven that facial expressions are startling in their ability to inform responses from others, proving that

> A language is always embedded in the faces that announce its statements and ballast them in relation to the signifiers in progress and subjects concerned. Choices are guided by faces, elements are organized around faces: a common grammar is never separable from a facial education. The face is a veritable megaphone (Deleuze & Guattari, 1980, p. 179).

Investigators further recommend that future studies focus on the creation of therapeutic interventions that emphasize schizophrenic clients' ability to both accurately read and create facial expressions (Keltner et al., 1999; Schwartz et al., 2006; Falkenberg, Bartels, and Wild, 2008). Contemporary literature, however, stops short of suggesting specific techniques for remedying this particular struggle, placing emphasis on the need for innovative resolutions.

The creative arts therapies can provide the injection of originality necessary for addressing this unique obstacle. With this comes the knowledge that the arts have often informed the sciences. This is certainly the case in studies of the face, which reveal prior examples of scientific artistry as successful research that can be applied to drama therapy in particular, with its regular incorporation of embodied performative tools that allow for a focus on facial actions and emotional play many other modalities do not. Character studies, scene work, improvisation and projective devices like puppets, make-up and masks supply avenues to face gazing in a

contained manner that is both healing and pleasurable (Landy, 1993; Landy 1994; Landy, 2008). In addition, leaders in the field have often stated mental illness manifests as an inability to expand beyond a limited role repertoire (Landy, 1993). The recurrence of certain roles in inappropriate settings makes for a stagnancy or regression of existence. The desire to expand on this line of thinking leads to the palpable manifestation of these roles, namely, as expressed in the limited range of emotional expression (Keltner et al., 1999). The stifled range of facial expressions is the concretization of this limit, and is thus easily taken into account as part of creative interventions. As a result, drama therapy is unique in its capacity for bringing new awareness to the schizophrenic client stifled by limited demonstrative proficiency. By delving into the untapped resources of facial expressivity, this population serves to profit as drama therapists better understand the physiological underpinnings of their craft's efficacy.

Such insights not only serve as an important breakthrough for the treatment of schizophrenic individuals, but also have the potential to bring drama therapy into the awareness of those practicing in more widely accepted fields. A drama therapy that embraces and enhances its scientific roots is more likely to gain positive attention by the multitudes, thus making it more readily available to clients who could benefit from its holistic approach to healing the mind through bodily channels (Landy, 2006). Affect seems an area particularly suited to the strengths of a practice that gives participants permission to physically explore the expression of emotions (Jones, 2008). At the same time, schizophrenia, as a disease that frequently connotes a pessimistic outlook for any sort of improvement, creates clients in need of singular approaches to mental health (Falkenberg et al., 2008; Patterson & Leeuwenkamp, 2008).

Drama therapists can take advantage of contemporary interest in alternative methods of healing while simultaneously benefiting a population frequently left underserved. After all,

physicians now promote meditative yoga. Nutritionists tout mindfulness. The cover of mainstream magazines promise religiosity as curative. In an era when rigid adherence to mind-body dualism is increasingly called into question, interest in the marriage between the arts and sciences is once again piquing. Though *Descartes' Error*—suggesting "Je pense, donc je suis" is a limiting philosophy that ignores a synonymy between thought and being, emotion and rationality—has been articulated for a society struggling with this oft-unnamed schism, combating the false dichotomy is still a challenge (Damasio, 1994). "[M]edical schools…largely ignore those human dimensions as they concentrate on the physiology and pathology of the body proper…The net result of this tradition has been a remarkable neglect of the mind as a function of the organism" (Damasio, 1994, pp. 254-255). It is in the midst of this stated oversight that a bodily remedy to a mental illness like schizophrenia has the potential to prevail.

Drama therapy, as a natural product of mind and body, arts and sciences, offers a solution to the bifurcated gaze of traditional academia. Within this field we see the potential that rests at the center of a Venn diagram—a successful overlap drawing upon the best of what each has to offer. And as with any mixed breed, the struggle exists to shuffle off the pre-existing conditions of the parent elements and break forth in an adolescent gesture of individualization and survival. Drama is theatre; therapy is psychology. Drama therapy is both of these and somehow neither is sufficient. How does the child of these two distinct fields gain access to schizophrenic clientele so likely to thrive from its unique approach?

The desire becomes a diversification of the profession that highlights a natural convergence: drama therapy as scientific artistry. Evidence based practice rooted in successful research beckons the neophyte drama therapist seeking to usher a legitimized modality into mainstream America. And in pinpointing and proving specific ways that drama therapy is

beneficial for clients, the likelihood increases that once unattainable opportunities for exposing more individuals to the creative arts therapies will be made available. In essence, a strategic framing of the argument for drama therapy's positive impact on schizophrenic clients is key to ensuring it is valued as both an empirical and expressive treatment.

The notion of offering shrewd presentations of drama therapy research has been identified by Landy (2006) as a way to protect the future of the field. Landy (2006) suggests that drama therapy, as so insular a community and specialized a field must expand in order to survive. He expresses concern about the burnout drama therapists suffer as a result of working "in a system that neither supports nor validates the values and efficacy of" the discipline (Landy, 2006, p. 137). The continued battle to gain approval results in therapists who struggle with and often leave the sector, suggesting that professional retention and success could be dependent upon further acceptance from mental health practitioners (Landy, 2006). Thus, seeking a scientific explanation for anecdotally reported successes in schizophrenic clients during drama therapy treatment is pivotal to the worth of the argument presented in these pages. In part, the importance of this proposed research relates to the need for drama therapists to further understand their triumphs so they might better explain the need for their interventions.

Landy (2006) goes on to enumerate the ways in which the field must move forward, calling upon drama therapy pioneers to encourage their students to forge a bond between counseling psychology and drama therapy while publishing in more mainstream journals. He goes on to say,

> Research is an area of drama therapy that lags very far behind theory and practice. The low status of research in drama therapy is evident when perusing, for example, the volumes of the journal *The Arts in*

> *Psychotherapy* where one finds a consistent paucity of drama therapy research (Landy, 2006, p. 138).

This line of thinking is continued throughout the piece as Landy (2006) demonstrates what work must be done to keep the sphere of drama therapy ever expanding. The message is clear: we need to find concrete means of fact-finding (Landy, 2006).

Issues salient to the contemporary drama therapist are also at the forefront of David Read Johnson's (2009) article, concerning the dominant model of cognitive behavioral therapy (CBT) that currently reigns over the mental health field. The call to accommodate to this shifting perspective is reflective of the continued awareness that drama therapy sits just on the periphery of the medical model. As he addresses various paradigms creative arts therapists latch on to in order to justify healing through expressive catharsis, Johnson (2009) reflects on the pitfalls of each and echoes Landy's (2006) concern about the limited amount of quantitative research in existence.

Johnson (2009) speaks to the shifting perspectives over the decades that have emerged as psychological trends: meager metaphors for studying the mind that served as grasping attempts to stay relevant. Yet CBT has not become one of these trends for the drama therapist, whereas its empirically optimistic viewpoint and goal-oriented methodology, Johnson (2009) argues, may prove a fitting complement. "CBT insists that the client *accommodate* to an external set of 'healthy cognitions,' their own 'distorted cognitions' being viewed as products of traumatic schemas that need to be confronted and dislodged" (Johnson, 2009, p. 117). The usage of storytelling, role play as well as CBT's emphasis on creativity, humor, imagination, and resilience suggests that new work coming out of the drama therapy community could fit easily into this desirable model.

Johnson asserts that the creative arts therapies may need to take advantage of these overlaps and create more CBT oriented interventions. This, in conjunction with a willingness to attempt science-based research is believed to be the next step in keeping the field alive (Johnson, 2009).

A client-centered approach to an evolution of facial affect in schizophrenics provides on potential bridge between drama therapy and the CBT model. Clients can slowly make the necessary connections between facial expressions and social interaction by a process of articulating and addressing their struggles while employing purposeful, cognitive and behavioral solutions. Through attention to specific habits and exercises based on insight, self-help, and the alleviation of symptoms, drama therapists can comfortably place their creative arts therapy into the treatment schema in current favor (Rachman, 1997).

This thesis, then, is in part a response to the successes witnessed while working with schizophrenic clients, and in part a response to suggestions for the future of drama therapy. Landy (2006) and Johnson (2009) lay out potential paths of success that highlight the need to explore beyond our comfort zones as creative empaths. As students seek out new insights into the efficacy of the creative arts therapies, it is imperative that there be some nod to the larger landscape of societal expectation. My own interests have been steered in this very direction as my questions veer away from the solely narrative, and instead rest on the shoulders of methodical inquiry. At the same time, I am motivated by a desire to view the modality through an interdisciplinary lens, drawing upon scientific and philosophical ideologies in hopes of refreshing my awareness and honing my craft.

Ultimately, identifying specific strengths that result from the involvement of

facial expressions in the drama therapeutic encounter can offer noteworthy support for schizophrenic clients. Simultaneously, better understanding the work means continued research into treatment options that address the struggles inherent in flattened affect. Schizophrenics can gain exposure to important new techniques in mental healthcare. Drama therapists can gain insight into the worth of their modality when viewed through a scientific lens. And slowly, this approach to creative arts therapy can gain a stronger foothold, thus making it possible to reach more schizophrenic men and women. Truly, it is the reciprocal relationship at its best.

Methodology

This literature review and treatise is intended to provide a basis and argument for eventual quantitative studies into the relationship between the physiology of the human face and its role in the evolution of facial affect that occurs in schizophrenic clients during the practice of drama therapy. The author begins by providing a brief background of illustrated anatomy and physiology studies as they relate to past partnerships between artistic and scientific explorations into the nature of the face. Acknowledgment of these successful partnerships serves to further make the case for drama therapy as logical solution to scientific inquiry rooted in a rich history of like modal fusions.

Theories on the construction and meaning of expression are explained as a series of progressive insights meaningful to the field of drama therapy. This thesis will thus explore recent and current discoveries concerning voluntary facial expressions. Their potential importance to drama therapists is again discussed as suggested by the need to further employ scientific means as explanation for the drama therapy's success. In an attempt to contextualize the argument for a potential evolution of facial affect, the schizophrenic body is discussed in depth. The author combines current research literature on schizophrenia and affect in order to make note of the possible uses for drama therapy with this particular population. Drama therapy as a modality is elaborated upon through specific, possible methodologies that account for the needs of the schizophrenic body, the importance of the scientific method, drama therapy's strengths, and the ethical and philosophical implications of information thus garnered.

Leaders in the field of drama therapy have often stated mental illness manifests as an inability to expand beyond a limited role repertoire (Landy, 1993; Moreno, 1987). The recurrence of certain roles in inappropriate settings makes for a stagnancy of existence. The

desire to expand the line of thinking leads to the concrete manifestation of these roles, namely, as expressed in the limited range of emotional expression.

The human face, long considered the actor's greatest tool, lies at the epicenter of the academic fields in question. It only follows that drama therapists, in using what is already a part of the performer's toolbox, can build upon the benefits of the creative arts therapies in an arena currently lacking attention from the social sciences.

The author attempts to clarify the links amongst these various modes of study and promote a fuller understanding of the face, the nature of presenting symptoms, and subsequent quality of life issues that may result for clients. In addition, the author looks to the future, indicating the role of future research into this area of psychology in the hopes that there may be a move towards the recognition of drama therapy as a powerful and effective modality. By specifically gearing work towards the schizophrenic client, those who are so often misunderstood and underserved, the author seeks an expansion of hypotheses concerning the relationships among mental illness, drama therapy, and concrete steps taken by both client and therapist to create an evolution of affect.

This thesis is entirely a result of the author's suppositions concerning an area of potential for drama therapy. Research conducted thus far has been done through extensive reading. As a result, in order to clearly explain the nature of this highly interdisciplinary work, it has been necessary to touch upon a series of important modalities.

It is also necessary to note that the goal of this thesis is to ultimately work with clients as part of a well-designed program of experimentation. The scientific method is to be valued highly and employed with great care so as to put the ideas found in these pages to the test. These inquiries are best pursued as part of a research-oriented doctoral thesis and subsequently funded

work. Such are the goals of the author upon completing this degree, in hopes of determining the validity of the hypotheses contained heretofore.

Review of Literature

The Mirror Neuron has Two Faces

There is the face, as it exists on a purely physiological plane. Muscles tense. Muscles relax. Skin becomes wrinkled, then taut. The eyes widen or narrow. Beneath it all, a tracery of veins rests atop the skull's guiding structure. A closer look reveals the brain's symbiotic relationship to perfected musculature. The manipulation of the face means a heightened awareness by certain regions of the brain, mirror neurons firing—those purely biological pieces that fuel partnerships amongst anatomists, physiologists and neurologists.

Then there is the face, as it exists in action: smiling, frowning, threatening, welcoming. A window to the soul emerges, startling in its ability to elicit emotion and betray sentiment. This romantic notion is harder to name, driving us to acts of adoration and desperation. Therein lies the tugging of our most fraught heartstrings—faces that hold the secret to love at first sight; faces that start and end wars.

Arguably, both can be explained through 21st century understandings of the neuroscience paradigm. In a corporeal sense, brains inform the usage of each muscle, sending messages when and how to contract or slacken. Images are stored and experiences recalled. Emotionally, when our mirror neurons kick in, they stimulate feelings and offer us empathy for individuals sending non-lingual messages (LeDoux, 1996). Historically, both these faces have captivated humanity as great minds sought explanations through kinesthetic and soulful interpretations.

Arts, Sciences, I Believe You Two Have Already Met

It is no mistake that so many of our earliest researchers were artists and innovators—the mark of many a creative genius is a dedication to the very blood and bone of the human condition. In retrospect, it seems only natural that accomplished painters should have dissected

cadavers to recreate the human form, just as the contrapposto emerged in Greek's Classical Period only after sculptors began studying musculature. Conversely, it seems logical that so many scientific discoveries intended for the betterment of health and wellbeing took flight while building upon the outstretched wing of artistic endeavor (Choulant, Frank, Garrison & Streeter, 1920). So often today's possessors of natural gifts are placed on a bi-polar scale: analytical and linear or creative and emotional. Yet this compartmentalization is limiting and a detriment to the progression of ideas. The arts and sciences are no strange bedfellows, each one gently guiding the other towards new heights of edification. It makes sense that a therapeutic intervention grounded in the arts would pass along the demonstrated benefits of this partnership to clients.

Creative scientists repeatedly looked to creative means for a fuller understanding of the face's debility and capacity. While the modern mind may easily wrap around notions of bodily systems or muscles propped up by a skeletal frame, the inner workings of the body were one of antiquities' mysteries. Anatomists seeking somatic truths were led to grim work on primitive gurneys, making crude drawings of their findings that were little in demand by their peers. Such illustrations eventually led to considerable links between the artistic and scientific communities, however:

> This relation and communication between anatomists and artists of the first class seems, at least in Italy, to have been not without favorable influence upon the former and may have originated the notion that, even for the medico-scientific anatomy, equally good work might be done and better things accomplished than had hitherto been the case (Choulant et al., 1920, pp. 27-28).

This continued into the height of the Renaissance, as masters like Leonardo DaVinci and Michelangelo Buonarroti indulged in highly profitable partnerships with the anatomists of their day. It has even been theorized that the purpose of the work manifested more as anatomists aiding the cause of art rather than the other way around. Michelangelo was well supplied with freshly deceased bodies throughout his studies leading to legendary sketches—the very picture of anatomy synonymous with bodily studies (Choulant, et al., 1920).

Seventeenth century scientist and artist at Versailles under King Louis XIV, Charles Le Brun, was clearly attuned to the marriage of disciplines found specifically in an expressive countenance. He expanded on the "scientific ideas on the origins and physiological workings of the passions, and…derived from them a systematic theory of how they would affect the external features of the face, so enabling to portray them as required in his work" (Montagu & Le Brun, 1994, p. 17). His drawings offer thorough revelations of expressive eyes, eyebrows, foreheads, and mouths from different angles, largely published in his treatise *Méthode pour apprendre à dessiner les passions* (Le Brun, 1982).

At the time, one area of study simply fueled the other: a desire to execute perfect depictions on the canvas, in marble, and on stage, led artists to crave intimate knowledge of the body's workings. Today, remnants of this exist in the field of drama therapy, as clinicians focused on the health of their clients seek to sharpen their creative skills.

The Evolution of Darwin

The Bell boys. Scottish brothers Charles and John Bell (1824) worked extensively to create an understanding of the muscles, bones, and nerves present within the face in the late 18th and early 19th centuries. Capitalizing on their natural aptitudes as both illustrators and men of

science, the Bells gained popularity as surgeons, anatomists, physiologists and theologians. Their many gifts enabled the pair to educate the masses on a number of interdisciplinary topics. For Sir Charles Bell, like Le Brun, this manifested as a series of publications focused on the creation of emotion on the blank canvas, originally published in 1806. Today, his works are referenced frequently in medical journals, but also make appearances on lists of resources for art students (Choulant et al., 1920).

As Bell enumerated the many benefits of artists educated in the details of anatomy and physiology, he reflected on the greatest creative works in existence. While he intended to school the painter, the references are often to theatrical pieces that elicit powerful emotional responses and inspire the imaginings of passionate beings engaged in the drama of humanity. In hopes of conveying the complexity of sorrow, for example, Bell (1877) relies on a speech made by Constance upon the death of her son in Shakespeare's *King John*. Later, terror is best understood through an excerpt from *Richard III* (Bell, 1877). These frequent references to Shakespeare serve as reminders to the drama therapist that there are times when the sciences must look to the arts to explain the inexplicable.

Thus far, examples have portrayed the gifts that became nascent from a merging of the arts and sciences in the relation to the face on its physical plane. As the medical sciences developed over the centuries, the arts were recognized as beneficial to the natural progression of anatomy and physiology as we know them today. There was no oddity in being a "Renaissance Man", enjoying a diverse range of pursuits and a wide range of interests. This contemporary tug-of-war frequently plays out in an understanding of the value of drama therapy as a science based in the arts. Yet studies of the face, like drama therapy, prove there are avenues of study whose success relies wholly on composite education

A jolt of electricity. In his *Mécanisme de la physionomie humaine,* 19th century French neurologist Duchenne de Bologne (1862/1990) displayed a clearly hybrid interest in understanding the expressions of the face and the muscles exercised in order to create these facial actions. "[As] the first series of published physiological experiments to be illustrated by photography…it…has relevance to modern psychology, neurology…and the study of fine arts (Cuthbertson, 1990, p. xv).

Duchenne (1862/1990) began by referring to a series of artistic predecessors, including Le Brun and Bell, in an attempt to trace his academic lineage and pinpoint prior failings—namely an inability to completely isolate those muscles that create each expression. His desire for what he refers to as a "live dissection" results in the decision to harness electrical currents, thereby electrifying specific facial muscles and engaging in "electrophysiological research" (Duchenne, 1862/1990, p. 9).

This research consisted of the manipulation of subjects' faces by applying small jolts of electricity to pre-determined muscles. Duchenne then accorded a series of emotional experiences to the resultant expressions. The then novel medium of photography captured each of these poses, highlighting what he dubbed the ten muscle groups and their corresponding passions: attention, reflection, aggression, sadness, pain, joy, lasciviousness, weeping, surprise and terror. Duchenne provided such designations as the participants took on each prescribed countenance like marionettes yielding to the strings of a deft puppeteer (Duchenne, 1862/1990).

Presently, the images are mesmerizing, forcing one to wonder about the lives of Duchenne's subjects. He acknowledged that the surge of electricity may have been painful, and when the manipulated expressions echo a sentiment of pain, it often elicits empathy from the viewer. What particularly fascinates, however, is the evident theatricality of the entire endeavor.

While there is a certain performative quality to a scientist laying electrical current on the faces of an old man, a young girl, and so on, Duchenne further emphasis this by devoting a large portion of his writings and photos to his "aesthetic section" (Duchenne, 1862/1990, p. 101). The casual observer flipping through the images of the book will likely note a number of photos depicting the faces of famed statues in the throes of intense emotion. Further, a number of pictures are renderings of dramatic tableaux directed by Duchenne, in which he provides extensive background stories to the gestures and facial expressions he creates. One such example features a model, Duchenne explains, dramatizing his imaginings of the expression that Lady Macbeth must have had

> when, after assuring herself that Duncan and the guards, whom she had drugged, were soundly asleep, and after having given Macbeth the murder signal, she waited while he cut the throat of the king, his host and benefactor (Duchenne, 1862/1990, p. 120).

Once again, Shakespeare is the acknowledged expert in the articulation of emotions, capable of acting in service of scientific inquiry. Drama therapists will again recognize echoes of their profession in this work, as posed scenes, dramatic texts, and even costumes are employed.

These tableaux are created and described with tremendous precision. Each one clues the reader in to the fact that Duchenne was a man of science with a passion for the arts. He is easily able to make the connection between his work as a neurologist and society's continued lust for creative ventures (Duchenne, 1862/1990). Relationships between emotion and the soul are highlighted. The face, as a tool of the theatre, connects us to manifestations of inner being. Philosophically, spiritually, scientifically: however

one chooses to view notions of the inner self, Duchenne is clear that facial expressions lead us to further understanding that which is not always expressed clearly. His book offers a link between the topics: the face is indicative of emotion, and there is a specific physiology that can be understood in order to create these emotions. There is an almost empirical drama to this work, as evidenced by Duchenne's series of photographs.

Already we see the face as a tool of expressivity, something it is worth pointing out, that is impaired for the schizophrenic client (Falkenberg et al., 2008). It is apparent how clear the arrow points from a biological comprehension of the face to an artistic utilization of this information, as we follow a 500-year through line that values the established monism of scientific input bound to creative output. Indeed, there is a natural order of things revitalized in seeing today's so-called "hard sciences" not only esteem, but made reliant upon the words of Shakespeare. There is a symbiosis enjoyed by the scholars that seems to supplant modern hierarchies. And by accepting such mutuality, there is a forward momentum served by commonality of purpose.

It is this age-old idea that would best be served up once again through a filter of modernity. In eschewing the pitfalls of a tiered system, drama therapists can engage in the luxury of scientific artistry appreciated by the abovementioned individuals. Building upon the convergences that exist in drama therapy, it is useful to emphasize the importance of understanding facial expressions as they manifest in treatment. The schizophrenic client in particular, whose illness is typified by disruptions in normalized facial affect, can continue working beside a trained clinician with an artistic eye. Duchenne's tableaux, for example, are not far removed from the modern drama therapist's *sculpts*—events, relationships, and emotions captured in a physicalzed freeze-frame pose—variations of which are described in writings on

Psychodrama, Playback Theatre, Boal's Theatre of the Oppressed and Rainbow of Desire, DvT and Role Theory (Boal, 1985; Moreno, 1985; Landy, 1993; Landy, 1994; Boal, 1995; Bergman, 2000; Johnson and Lewis; 2000, Salas, 2000; Sternberg & Garcia, 2000; Johnson, 2005; Landy 2007). As such, applying methods similar to Duchenne's that take into account the emotional state of the client could further aid the drama therapist in guiding schizophrenic clients towards insight into their own outward performance of internal emotions. Moving forward with a lust for the creative that is bolstered by scientific possibility, drama therapy is expanded through indispensable partnership.

The expression of emotion in man and animals. Darwin (1987) is often credited with beginning the first genuine studies of facial expressions as we view them today (Ekman, 1973; Ekman, 1997). In seeking out the roots of facial anatomy and its connection to emotions, we must acknowledge the hypotheses he put forth when first engaging the reader in a discussion of the value of facial expressions as a tool of evolution. Firm in his belief that "as long as man and all their animals are viewed as independent creations, an effectual stop is put to our natural desire to investigate as far as possible the causes of expression" (p. 19). Darwin (1998) discussed those manifestations of emotion that seem particularly connected to what he deemed the "allied species": the fearful bristling of hair, the bared teeth of anger, the muscles exercised during laughter (p. 19). The expressions in both man and animals are explored in part because of Darwin's belief in a universality linking species to one another, thus supporting his theory of evolution (Darwin, 1998).

Darwin (1998) enumerates three general principles concerning the topic. The first principle stated that certain expressions are a result of the need to "relieve or gratify certain sensations, desires, etc.," and whenever associated emotions are stimulated, these expressions are

once again performed out of habit (p. 34). The second principle stated that when an emotion antithetical to the state of mind inducing an emotion is aroused, "there is a tendency to perform movements of a directly opposite nature" (Darwin, 1998, p. 34). Finally, the third principle named the relationship between the nervous system and emotional states (Darwin, 1998). In working with schizophrenics, drama therapists can look to these three tenets as guiding principles for both inappropriate and appropriate expressions, acknowledging when a facial action serves to relieve a desire, indicates something counter to what is felt, or proves congruent to an emotional state.

Shakespeare makes yet another appearance in anatomical writings as Darwin seeks to illustrate his proposed hypotheses. Once again, science rests upon the firm crutch of the theatre arts in order to strengthen an argument and make it applicable to the masses. In speaking of habit and the power of one's nerves, Shakespeare's Norfolk in *Henry VIII* (as cited by Darwin, 1998, p. 37), states:

> Some strange commotion
> Is in his brain: he bites his lips and starts;
> Stops on a sudden, looks upon the ground,
> Then, lays his finger on his temple; straight,
> Springs out into fast gait; then stops again,
> Strikes his breast hard; and anon, he casts
> His eye against the moon: in most strange postures
> We have seen him sets himself (iii, 2).

It is through this powerful reference that Darwin (1998) was able to communicate to his audience those expressions of emotion that are expected by the observer. This is Darwin's discussion of

habit, as articulated by a theatrical and literary master. Therein lies the potential for the hypothesis to be understood with clarity, and again, the point is made that there is a long history of understanding the face through the employment of the arts. Here, a scholar seeks to make information more palatable to the masses. Yet another the parallel may exist for drama therapists as clinicians seek to take the work of the scientist and apply it creatively to the patient through the use of theatre. This has been done for millennia (Landy, 2007). Here, we see an example of it with specific application to the human face and its many powerful uses for silent communication.

Throughout the book, Darwin (1998) calls upon depictions of emotion in various settings. Chapters are broken down by type of emotion, with illustrations and extensive descriptions offered along the way. Both biological and evolutionary explanations are offered as Darwin (1998) guides readers through information concerning humans and the animals from which they descend. It is noted that those who are mentally ill are of special interest throughout the work, as they "are liable to the strongest passions, and give uncontrolled vent to them" (Darwin, 1998, p. 20). As a result, mental patients make appearances as examples of aggrieved expressions, hearty laughter, violent fear, and blushing (Darwin, 1998). In receiving this special categorization, the mentally ill are acknowledged for both their aptitude and struggle with facial expression. Though more than a century ago, it was recognized that disproportionate affect set these individuals apart from others. This suggests that perhaps there has long been an expressed relationship between the unexpected display of emotional expression and mental illness—now an aspect of disease that can be addressed through the creative application of new methodologies. Once again, schizophrenic clients come to mind as a population that is identified by its unconventional facial affect. While the mentally ill may be though of by current therapists as individuals with chemical imbalances that manifest as an array of ailments, to the laymen, they are frequently set apart by

their facial actions and responses to stimuli. Drama therapists have the potential to address these difficulties during transparent treatment, thus allowing schizophrenic clients to actively experiment with behavioral and cognitive alternatives.

About Face

It is interesting, as Paul Ekman (1998) states in his commentary on the book, that *Expression of Emotion in Man and Animals* was popular during its original release, (capitalizing on the wild success of 1859's *Origin of Species*) yet failed to inspire much attention on the topic for almost a century following its publication. Facial expressions were viewed as indicative of personality characteristics rather than evolution, acting as a counterpart to phrenology, the 19th century fad that seemed to draw upon similar anthropometric guidelines in order to determine one's worth. Anatomists sought to further their understanding of the body's workings, but attention was placed on signifiers for the individual in question rather than the species as a whole (Ekman, 1973; Ekman, 1998).

There was a reemergence of interest once again in the 1920s, with researchers attempting to challenge, clarify, and/or build upon Darwin's hypotheses. Information gained during that time was often contradictory, making it difficult to set a trend in motion. For some time, interest again flagged, and facial expressions were relegated to obligatory footnotes in sociology and psychology textbooks (Ekman, 1973; Ekman & Oster, 1979).

Here, there, everywhere. The emergence of proof in the late 1960s and early 1970s of universality of expression renewed interest in Darwin's (1998) work, and it was viewed as a complement to the nascence of CBT. Ekman and his colleague Friesen (1971) were a part of this slow shift as they attempted to understand universally understood signs of expression in their studies abroad. By presenting images of faces to subjects from a variety of nations, they learned

expressions were labeled similarly regardless of the nation from which one hails. In order to avoid biases based on exposure to similar sources of media, Ekman and Friesen (1971) decided to take their research to areas of New Guinea with little to no interaction with the Western world.

The participants spoke no English, and the tasks were created with this in mind. Each subject was told the same story rehearsed by a translator, and shown several pictures of faces depicting emotion. The subjects were then asked to match the photo depicting emotion with the sentiment described in the story. The *emotion stories*, as they were called, were focused on happiness, sadness, anger, surprise, disgust and fear (Ekman & Friesen, 1971).

The results indicated that the men, women and children in the study were able to accurately label the majority of expressions. The only difficulty discovered was in the ability to determine the difference between fear and surprise—which Ekman and Friesen (1971) suggested might manifest similarly in the New Guinea culture, where fear and surprise likely coincide. Ekman and Friesen (1971) also discussed the role of facial expressions within varying societies. They went on to indicate that not all emotions will be elicited by the same sets of circumstances from culture to culture, and antecedent behavior once emotions are felt may vary. Yet it appears likely that the actual expression of the emotion itself is a dependable universality (Ekman & Friesen, 1971). This information concerning universality puts the drama therapist in mind of a means of intervention that may span the globe. While there are always limitations to any therapy created, it is important to acknowledge to which populations one might apply one's work. Universality of emotion puts one in mind of a basis for creative work that can be expanded upon in differing cultural contexts.

Just the FACS. Ekman and Friesen continued to work together over the years in a variety of capacities. One of their most noteworthy achievements includes the creation of the

Facial Action Coding System (FACS), originally presented to the public in 1976 as a systematic analysis of facial expressions. The researchers (1982) described their desire to "develop a *comprehensive* system that could distinguish all possible visually distinguishable facial movements" (p. 179). This deeply anatomical codification employs descriptions of musculature accompanied by still photos, enumerated muscle isolations, and brief video clips. "FACS was developed by determining from palpation, knowledge of anatomy, videotapes and photographs how the contraction of each of the facial muscles changed the appearance of the face" (Bartlett, Hager, Ekman, & Sejnowski, 1999, p. 253).

These guides provide the details of emotive responses as evidenced by apparent and thusly measurable if minimal actions. From this, clinicians and artists (many animators find the FACS to be a great asset) can determine how, exactly, the human face can be modeled and recreated, communications interpreted, and pathologies corrected (Kundert-Gibbs, 2009). In addition, by maintaining a basis of information in the definitive movements and muscles, allowances may be made for individual differences, however they manifest (Ekman & Friesen, 1982). While Ekman and Friesen (1982) acknowledged the limitation in focusing only on those motions detectable by the naked eye, there exists a potential for gaining a medical knowledge of the body's traditional emotional palette. "Working through the exercises of the FACS Manual may also enable greater awareness of and sensitivity to subtle facial behaviors that could be useful for psychotherapists…who must penetrate deeply into interpersonal communications" (Hager, 2003).

Ekman and Friesen (1982) ultimately created an extensive set of pictures depicting facial expressions accompanied by detailed explanations. It is believed learning to utilize the FACS system guides towards the measurement of social interaction, as well as emotional expression

and cognitive processes (Bartlett et al., 1999). This set of training tools intended to aid in measurement and understanding has been little acknowledged within the drama therapy community, though many in the profession are familiar with Paul Ekman. Many researchers in the mental health field have employed it to further their work. Enough studies have been conducted utilizing the FACS that entire books exist of research rooted in this method (Ekman & Rosenberg, 1997).

Drama therapists will benefit from applying their understandings of the workings of the face to schizophrenic individuals with flattened affect. By learning details concerning the muscles that play a role in emotional facial actions, directing a client to exercise and utilize the face will become more manageable and meaningful. Just as any therapist focused on embodiment is well served by knowledge concerning the physical limitations and possibilities of a client's body, so too will the drama therapist be better able to serve a client struggling with affect once a further comprehension of facial capacity had been attained. In addition, the limitation articulated by Ekman & Friesen (1982) concerning the focus of the FACS on movements detected solely by unaided observation makes it accessible to the drama therapist and client working without the benefit of high tech equipment.

By focusing only on what the therapist and client can observe in one another, further avenues for connection may be created, thus aiding in the client/therapist rapport. This type of basic, observable behavior works well with what Johnson, Forrester, Dintino, James and Schnee (1996) describe as the desire to create a therapeutic version of Grotowski's via negativa—one that removes all "playthings" that prevent authentic encounters. This drama therapy technique, Developmental Transformations (DvT), focuses on embodied encounters in a clearly defined and agreed upon playspace, moving away from sets, props, and costumes. Instead, the drama

therapist and client work off of one another and one another only, focusing on what emerges in the relationship during play (Johnson et al., 1996). This description of the modality Johnson et al. (1996) call a "poor drama therapy" suggests DvT could certainly be implemented in a manner that takes into account the visible facial movement discussed by Ekman and Friesen (1982).

Feedback and contagion and the brain, oh my! Ekman, Levensen, and Friesen (1983) began looking into the nature of emotions as expressed outwardly and experienced internally in their article *Autonomic Nervous System Activity Distinguishes among Emotions*. Through the assistance of both actors and fellow scientist participants, the researchers compared the bodily responses when individuals relive emotional experiences to those that occur when they take on the countenance of certain emotions. Surprise, disgust, fear, anger, sadness, and happiness were targeted as each subject was videotaped. The autonomic nervous system (ANS) was measured by heart rate, left and right hand temperatures, skin resistance, and forearm flexor muscle tension (Ekman et al., 1983).

Subjects were first specifically guided to produce non-emotion specific expressions, followed by "an expression that theory and evidence indicate universally signals one of the target emotions" (Ekman et al., 1983, p. 1209). With the use of a coach and a mirror, participants were told which muscles to contract in order to achieve the desired affect. The second task required that participants relive an experience that would elicit one of the desired emotions for 30 seconds. The physiological responses to the two sets of tasks were compared (Ekman et al., 1983).

The results indicated that the ANS responded differently to the varying emotions for which the research team was testing. There were distinct responses to positive emotions that stood in contrast to negative ones. In addition, there was further differentiation amongst sadness,

fear, and disgust. The suggestion, then, is that the body is keenly attuned to the emotional states it experiences. It goes beyond a mere positive and negative polarity, but rather travels the complete arc of the emotional pendulum (Ekman et al., 1983).

Of even further interest may be the fact that the bodily responses do not cease when subjects are simply posing, rather than reliving:

> Particularly intriguing is our discovery that producing the emotion-prototypic patterns of facial muscle action resulted in autonomic changes of large magnitude that were more clear-cut than those produced by reliving emotions (a more naturalistic process) (Ekman et al., 1983, p. 1210).

The discovery that voluntarily exercising facial muscles could create involuntary responses in the ANS led to further studies of this nature (Levenson, Ekman & Friesen, 1990; Levenson, Carstensen, Friesen & Ekman, 1991). The question emerged, to what extent can individuals choose the emotions they feel? Is it feasible to decrease or increase the potency of an emotion by manipulating corresponding facial expressions? The Facial Feedback Hypothesis, as it is now called, suggests that this is the case. By making specific faces, individuals can simulate the internal experience of the emotion (Penn & Combs, 2000). This research, however, fails to account for individuals who either do not or cannot make facial expressions. Schizophrenic clients with flattened facial affect have only recently begun to make appearances in literature addressing the facial feedback hypothesis and emotional contagion (Schwartz et al., 2006; Falkenberg et al., 2008).

Ekman (1992) suggests, “emotions are characterized by patterned changes in both expression and physiology” (p. 35). He goes on to note that individuals who make voluntary

facial expressions largely report emotional experiences that coincide with the according facial actions. In a later publication, Ekman (1992) explains how pivotal it is that individuals focus on more than the voice when seeking information, as more valid interpretations are revealed through *leakage*—brief slips that indicate emotions the speaker is concealing (p 440).

Here is yet another piece to the puzzle for drama therapists. If clients are experiencing some of the posed emotions in a session, it makes sense why they might physically and emotionally feel healthier following participation. For schizophrenic clients, whose emotions are not always good indicators of their feelings, drama therapy could provide additional opportunities to experience deeply felt emotion and make connections between action and feeling.

Some of these ideas are explored in a study conducted by Paul Ekman and Richard J. Davidson (1993). The authors began with a tripartite inquiry. They hoped to determine a) whether smiles indicate both negative and positive emotions, b) whether manipulating the face to mimic certain expressions could recreate the physiological responses associated with the corresponding emotion, and c) "whether physiological activity is differentiated only for the extent but not the type of emotion aroused" (Ekman & Davidson, 1993, p. 342). The authors assert that the smile is a complex manifestation of emotion within a deeply varied tradition of expression and go on to cite the differences between smiles that focus primarily on the use of the muscles around the mouth and cheekbones, versus one that utilizes muscles around the eyes, creating so-called "crow's feet". The latter, more joyful smile is called the aforementioned Duchenne smile (Ekman & Davidson, 1993).

This study involved fourteen undergraduate students from a sample of forty-five. Each subject was hooked up to electrodes in order to measure electroencephalography (EEG) while

making guided faces under the instruction of a lab employee. One expression was measured as a baseline, a second incorporated a rising of the cheeks to mimic a Duchenne smile, and a third was a basic smile utilizing only oral musculature. These expressions were maintained for 20 seconds (Ekman & Davidson, 1993).

Ekman and Davidson (1993) discovered that regional brain activity was stimulated similarly when facial expressions were performed voluntarily and involuntarily. The result is the suggestion that

> it is the morphology of facial musculature movement…that is responsible for the comparability in the patterns of EEG activity found in voluntary and spontaneous forms of smiling…it may be possible for an individual to choose when to generate some of the physiological changes that occur during a spontaneous emotion—by simply making a facial expression (Ekman & Davidson, 1993, p. 345).

This line of thinking could have powerful implications for schizophrenic participants in the field of drama therapy, which proves to be a psychological intervention rooted in corporeal connectedness. If facial expressions, even when manufactured, trigger internal experiences, what occurs during performance? Certainly many actors have known incidents during which the emotions they indicate onstage have led to somatic consequences. “That’s why there are exercises specifically designed to help you get out of role when you exit the stage. Sometimes it’s a problem…but if a scene is joyful, it can boost your mood” (M. Melnyk, personal communication, July 11, 2009). For a schizophrenic client whose range of outward emotional expression is limited, playing scenes or characters that utilize positive as well as negative facial expressions could capitalize on this. Many schizophrenic men and women report experiences of

depression, leading to additional sluggishness and stiff responses (Penn & Combs, 2000; Falkenberg et al., 2008). In light of this additional struggle, these clients may find further success in exercising an array of facial actions that communicate some experience of pleasure to their bodies. Additionally, further studies utilizing drama therapy and these measurement techniques might pinpoint some of the breakdowns in schizophrenic clients' emotional regulation, or offer inroads to continued methods of treatment.

In the early 1990s, an old term gained new momentum: *emotional contagion.* Hatfield, Cacioppo, and Rapson (1993) explain the concept more fully as a slow move towards acknowledging one's own emotional state while assessing the emotions of another. They go on to describe the moment-to-moment reflections—of face, voice, and body language—that occur in standard interactions. These reflections may be miniscule; often times they are barely detectable by the naked eye and may only be observed through the use of sophisticated technology. Yet this unconscious move towards synchronicity makes for feelings that are infectious (Hatfield et al., 1993).

Hatfield et al. (1993) go on to describe the process of emotional contagion as a progression from mimicry to feedback, resulting in contagion. In other words, the natural tendency to take on the voice, posture and expressions of a conversation partner leads individuals to take on the emotions suggested by this physicality. Hatfield et al., (1993) attempt to describe the experience in part through a reference to theoretic concepts of performance: "Konstantin Stanislavski…noticed the connection between posture and performance…Stanislavski proposed we may relive emotions anytime we engage in a variety of small actions that were once associated with these emotions" (p. 98).

This empathy is linked to the potential for interpersonal education and further insights into human behavior. As breakdowns occur and are understood as part of emotional contagion, it becomes possible to improve relationships and learn the secrets to effective communication. Drama therapy, as a therapeutic technique rooted in the creation of rapport, can be useful in its capacity for such empathy building. Hatfield et al. (1993) do not reference a dramatic text by accident—practitioners capable of connecting embodied exploration with emotional comprehension will likely find some explanation for their success in this phenomenon.

Lee, Dolan, Josephs and Critchley (2006) looked into the concepts of facial feedback and emotional contagion through the application of neuroscience—a field greatly popularized over the past decade (Johnson, 2009). As interest in the experience of emotions inspired by the adoption of facial expressions increases, the link between this experience and emotional contagion has been emphasized. There is little understanding of the brain functioning involved in these processes, however (Lee et al., 2006).

In hopes of adding to the limited body of knowledge, Lee et al. (2006) recruited 18 healthy subjects and employed functional magnetic resonance imagery (fMRI) to scan their brains while engaged in the mimicry of both emotional and non-emotional facial expressions. The subjects were presented with short films of actors indicating either emotions (anger, happiness, and sadness), or non-emotional, ingestive sequences (chewing and licking). A total of 24 viewings occurred, which involved either passive viewing (PV), or imitation (IM) (Lee et al., 2006).

The results indicated that regional brain activity is linked to the affective engagement of emotional expressions, but not non-emotional expressions. “Moreover, [the] study applies novel methods to the interpretation of neuroimaging data in which metrics for facial movement

delineate the direct coupling of regional brain activity to expressive behaviour" (Lee et al., 2006, p. 128). The study further indicated that specific areas of the brain were activated in proportion to the facial expression exercised, and in coordination with regions linked to the mediation of social affective interaction. Smiling, in particular, is highlighted for its elemental function in amygdala activity. Lee et al. (2006) note that while the amygdala is often implicated for its role in fear and anger, it is not often associated with happiness. This study, however, indicates an increase in activity in this primitive area of the brain that suggests there may be a powerful effect on the body when one imitates the expression of a smile. Lee et al. (2006) conclude that smiling "may thus represent a more salient and socially committing (or perhaps risky) behaviour than imitation of other expressions" (p. 133).

Of interest is the notion that what many consider the friendliest expression—the smile—could in fact be perceived as the most threatening. For many clinicians, the smile is utilized in hopes of building a rapport. Yet while facial expressions produced during drama therapy exercises may elicit internal experiences, the sensitive therapist must also remember that not all experimentation with facial action feels safe. Many might say that it is easier to express a kind feeling than a cruel one, yet the findings in this study suggest this may not always be the case (Lee et al., 206). Schizophrenics, in particular, are known for their struggles recognizing and correctly interpreting smiles, meaning this piece of information may be important when working on facial expressions with this population (Schwartz et al., 2006; Falkenberg et al., 2008).

As discussion has continued concerning the role of facial feedback and emotional contagion in the cognitive processes, researchers have gained particular interest in the role of the mirror neuron system (MNS). The mirror neuron, frequently identified as the neurological basis for empathy, has been at the center of considerable attention for more than a decade (Enticott,

Johnston, Herring, Hoy & Fitzgerald, 2008). Enticott et al. (2008) identify facial emotion as an area that is not well understood in terms of the MNS, and pinpoint this as the goal of their research.

Participants were asked to complete two tasks: the Visual Discrimination Task, and the Static and Dynamic Emotion Recognition Task. The former required the subjects determine whether two photos presented were the same or different; the latter required the subjects determine whether a single face depicted fear or surprise. Transcranial Magnetic Stimulation was utilized in order to determine the activity of mirror neurons during these activities (Enticott et al., 2008). The results indicated that, "During facial emotion processing, facial emotion may provide an internal simulation of the observed motoric behaviour (i.e. facial expression) that evokes a similar emotion in the observer…thus facilitating the identification of that emotion" (Enticott et al., 2008, p. 2854). This points to the fact that the MNS is involved with the processing of work done in a drama therapy session. The question then becomes, what tests can be created to determine the extent to which the MNS becomes engaged and how is this healthful and productive for clients. Currently, little research has been done into the MNS of schizophrenics making facial expressions, so the brain's workings for these men and women is not fully understood. This is an area of interest, however, for drama therapists who wish to work with schizophrenic clients and focus on their array of facial actions as a means of social skills training and therapeutic intervention.

The danger here, as Johnson (2009) reminds us, is to avoid making this neuroscience paradigm little more than a link between two loosely connected facts. The MNS is *involved* in the processes of drama therapy, therefore studying drama therapy leads to a study of mirror neurons. However, the wary inquirer might seek to know how best to maximize the potential of

all systems involved in drama therapeutic interventions. If mirror neurons do play a role, it may be possible to take advantage of and build upon their current place in popular science? There is also a benefit in information garnered for edification and reference only. Regardless, the fact is that this is a topic that is gripping America—indeed, the world.

Contemporary interest. It has been established that facial expressions are fundamental to human interactions, a fact that has begun to gain attention from the powers that be. In today's social climate, accurately reading the intentions of those around us is acknowledged as an important part of success and survival. At the same time, expanding one's own facial repertoire has been tacitly embraced as a sign of health and happiness. Keltner et al., (1999) posit that the ability to manifest a wide range of adaptable expressions indicates a healthful mental flexibility. Their belief that studying the face lends itself to clues regarding adjustment to difficulties has been the impetus for continued research into this subject. "Finally, studies of facial expression and psychopathology point to possible causes, consequences, and interventions related to emotional disturbances (Keltner et al., 1999, p. 18).

Keltner et al. (1999) also enumerate three important ways that facial expressions serve a social purpose: a) they provide immediate feedback concerning intentions, objectives, and potential threats; b) expressions evoke desirable responses from others, c) they offer tacitly understood deterrents or incentives for certain behavior. Theoretically, one's skilled use of facial expressions can shape one's entire life, from the signals given off, to the emotions one elicits. A clinician's awareness of this potent feature can lead to a fuller understanding of a client's past and present coping mechanisms, social interactions, and adaptability (Keltner et al., 1999). Understanding the complexities of the face can thus be viewed as a useful and even necessary aspect to therapeutic training.

Over the years, facial expressions and the importance of nonverbal communication have gained enough public interest to merit entrance into the realm of popular culture. Further background information on the importance of the face is offered in the documentary *The Human Face* (Erskine et al., 2001). Writer and narrator John Cleese is able to incorporate a substantial amount of information without bombarding the viewer, in this user-friendly mini-series from the British Broadcasting Company (BBC). The first episode, in particular, entitled "Face to Face", engages the audience immediately with a discussion of those whose struggles with facial expressions manifest in limited and painful social interaction. One young girl who suffers from Möbius syndrome—congenital, neurological, full facial paralysis—is followed as her parents choose surgical options to enhance her limited muscular capacity. The family discusses the degree to which the child has had to fight assumptions that she is "disinterested, stupid, retarded, or not paying attention" (Erskine et al., 2001). The struggle to read affect is additionally brought to the forefront during an interview of a Cambridge student with Asperger's who undergoes a Magnetic Resonance Imaging (MRI) while viewing various pictures of expressive faces. The brain scans are compared to those of John Cleese, who undergoes the same experience, only to reveal that the brains of those with Asperger's do not react to facial expressions. The Cambridge student is able to provide a brilliant example of the legibility of affect gone awry. He speaks candidly of mapping out expressions, building a very concrete sense of affect as expository of emotion, and it becomes clear how much individuals rely upon certain universalities (Erskine et al., 2001).

The video also follows the story of a married couple on the verge of divorce and the ways in which their facial expressions create physiological distress in one another. Far from a basic superficial exchange, the experiences are visceral, physiological, and fraught with meaning. The

couple is hooked up to sensors that measure their heart rates and oxygen output, as they are videotaped arguing. In this way, the psychologists working with them are able to pinpoint exactly how the body responds to the expressions made. For example, her contempt, an emotion that proves to be one of best predictors of divorce, is accompanied by an increased heart rate in both partners, making it difficult for either one to listen to the other (Erskine et al., 2001).

It is in this video that Paul Ekman discusses the seven basic emotional expressions: contempt, fear, anger, joy, surprise, disgust, and sadness. Ekman, whose studies of the human face have often revolved around lies and deceit, explains the way the trained eye can pick up on *microexpressions*—brief indicators of the true feelings behind what is being said, and lasting about 1/25 of a second.

A portion of the program is then dedicated to laughing yoga as it is explained how faking laughter creates the internal experience of joy, which can be cathartic. Filming in Mumbai focuses on daily laughing groups proven to help boost the immune system and combat the negative symptoms of stress. Dr. Katari, who leads these laughing groups, speaks of the need to "fake it until you make it", indicating the body cannot tell the difference between a genuine and false laugh; the benefits are felt regardless. Not only this, but the shared laugh is prized for its ability to bring peoples together, breaking down barriers of class. We respond naturally to laughter, and Dr. Katari is a firm believer in bringing his method into prisons. Here, the viewer sees the remarkable ability of laughter to erase barriers between guards and prisoners. "I was amazed by how laughter connects you with people; it's almost impossible to maintain any sort of distance or social hierarchy. Laughter is a force for democracy" (Erskine et al., 2001).

The episode offers fodder for the imaginative drama therapist, aside from an understanding as to how far reaching the effects of facial affect are. Science and technology

feature prominently in the documentary and it is impossible to ignore the many possibilities for measuring drama therapy's success in using facial expressions creatively. The scientific methodology in use in the film stops short of embracing the creative arts therapies; in fact, they are never mentioned. However, this leads to the notion that these technologies could help provide some sort of computable investigation. In addition, there is value to the phenomena seen in the laughing yoga groups as participants enjoy physiological benefits as well as social inclusion. Schizophrenic clients could find connection in drama therapy groups, just as prisoners are able to engage in laughing yoga treatments. Simultaneously, the schizophrenic body has the potential to see physical and emotional gains by simply "faking it".

Laughter as an affective release is further explored as one of the core human experiences in *Radio Lab* with Jad Abumrad and Robert Krulwich (2008). In this radio documentary, the contagion of laughter and nature of laughter is explored beginning with a scientist who claims that humans are not the only animals that laugh. His research on rats proves that tickling them leaves them giggling. This calls into question any number of ethical issues surrounding the internal emotional lives of so-called lesser creatures. Assumptions are addressed, and the legibility of laughter is questioned. Assigning human qualities to rats is noted as a turn-off to many individuals who would have to reorder their sense of themselves within the hierarchy of creatures (Abumrad & Krulwich, 2008).

Further into the program, it is revealed that laughter is rarely about what is funny—it is about connection and social relationships. Laughter only occurs with some sort of stimuli: either another individual, or perhaps a vicarious stimulus (radio, film, remembering a conversation with a friend). Typically, however, laughter is more about communication with one another. On an evolutionary scale, there are indicators that laughter began as a sign to others: a gentle promise

that beings are engaged in play, and no danger is present. We see this with chimps, which breathe heavily in a snorting fashion similar to our own "HA" when they become playful. We as humans inherited these signals and found them to be contagious. One individual laughs, then another, then another—we infect one another with our laughter in a general release of emotion and shared sense of delight and security (Abumrad & Krulwich, 2008). This acknowledgment of laughter as a social interaction is reminiscent of prior discussions concerning emotional contagion, which suggests that one of the key components in facial actions lies in the messages communicated to others (Hatfield et al., 1993; Lee et al., 2008). Johnson et al. (1996) also remind us how crucial these interpersonal relations are when drama therapy is brought to clients in its raw, improvisational state, DvT. "Few experiences are more profound than the simple presence of another person (p. 296).

This documentary (Abumrad & Krulwich, 2008) works well as an in depth complement to *The Human Face* (Erskine et al., 2001) regarding the positive qualities surrounding some manifestations of affect. Laughter, which seems so purposeless, is again noted as extremely healing, building bridges between individuals with remarkable alacrity (Abumrad & Krulwich, 2008). The unique potential for harnessing a shared affect guides us toward the benefits of manufactured affect (the aforementioned laughing yoga, for example). It is also interesting to juxtapose the assumptions of limited experience based on the affect of animals, and the way such assumptions bleed into beliefs about the mentally ill. Frequently, mentally ill clients, like animals get placed on lower rungs of the hierarchy, as both groups are limited by superficial beliefs concerning their capacity to achieve rich inner lives.

Radio Lab tackles the topic of affect once again by picking apart the nature of deception, largely as it is indicated by leakage: the effort of lying flickering, if briefly, across the face.

These expressions, according to researcher, psychologist, and pseudo-celebrity Paul Ekman, are the aforementioned microexpressions that occur so briefly and are easily missed by the untrained eye. Ekman makes reference to his FACS, which provides detailed explanations for the types of emotions indicated by the musculature engaged by the face. He goes on to explain that, while there is no definitive indicator, it is possible to generally gauge the veracity of statements presented at any given time (Abumrad & Krulwich, 2008).

A portion of the interview is conducted en route to John F. Kennedy airport, where Ekman conducts security trainings in the method of microexpression reading he has created. This training program is nationally recognized and implemented in hopes of deterring crime. Paul Ekman's FACS and microexpression training reveal the extent to which facial qualities become not only labeled, but also organized and categorized. Reading deception becomes important: and elicits curiosity as to whether abnormal affect will be misunderstood as deceit, leaving schizophrenic clients even more vulnerable.

These questions arise again in "Surveillance Technology, if Looks Could Kill," a brief article in *The Economist* concerning nonverbal communication as it applies to national security, surveillance, and terrorism (October 28, 2008). Ekman's FACS and microexpression are used as jumping off points for the face in particular. New projects are described, including "Project Hostile Intent", which is intended to utilize this new technology of behavioral observation. In addition, military checkpoints will employ these training systems in conjunction with cameras that pick up those fleeting signs of leakage the human eye is likely to miss. The training of the American military works in concert with insurgent training to maintain flattened affect, as such conscious attempts to suppress expressions typically create an increase in leakage (October 28, 2008).

Concerns are expressed within the article that misreading affect could lead to serious violations of human rights. For example, any indication of deception is met with incredibly fast responses, which may include forced medical examinations and "hostile-intent systems" likely to increase the risk of false accusations due to increased physiological responses to stress (October 28, 2008).

Some of these situations are dramatized in the Fox television program *Lie to Me*, based on the life work of Paul Ekman. The entire program, which has been renewed for a second season, indicative of its popularity, focuses on the lead character—a psychologist who created and is an expert at utilizing the FACS and microexpressions. His skills are employed all over the globe as he solves crimes, trains military and advises government personnel. Tim Roth, who plays the lead character, is seen making startling accusations, certain of his accuracy based on facial action and bodily gesture. His character routinely fights the notion that his work is little more than a carnival act, as he repeatedly sees directly to the truth of any matter, giving individuals around him the sense that he has a sort of super power. Topics include struggles to read individuals with facial paralysis due to the use of botox, as a disclaimer is presented that certain situations arise when the face is not indicative of internal experiences (Baum, 2009). As of yet, however, there have been no episodes that speak to the variations in affect that occur in those who are mentally ill.

These radio programs, television programs and news articles, are important reminders that the social landscape is ever shifting. While drama therapy often struggles to find its niche, there are inroads available. As facial expressions, emotion, and the role of the brain enter mainstream conversation, options become available for further discussion of drama therapy's natural attachment and attunement to contemporary topics.

Schizophrenia at Face Value

It is an easy trap to fall into—taking clients at "face value". The work of the drama therapist lies in seeking beyond the fragmented clues offered in conversation and countenance. Alternatives offered by the creative arts therapies make working with the resistant or inarticulate client somewhat easier as playing, storytelling, movement, humor, theatrics and projective devices provide inroads to heavily cloaked emotions.

Insides out. Schizophrenic clients are often recognized for the incongruousness of their behavior and reported experiences. "The symptoms themselves, such as mutism and excitement, make verbal therapy extremely difficult" (Johnson, 1984, p. 299). Therapeutic interventions that rely less on literal speech and open the space up for sensori-motor and representational modes of expression are far more likely to gain access to the inner workings of those in possession of little ego strength (Johnson, 1984).

Johnson (1984) offers some insight into an experience utilizing drama therapy with a young adult male client struggling with catatonic schizophrenia. He highlights the ways in which asking the client to embody his emotions, rather than verbalize them, provides clarity for both. As the client/therapist bond is strengthened, Johnson (1984) finds the client, Daniel, is able to depict his internal experiences of decision-making, insecurity, and rage. Johnson (1984) makes reference to the client's flat affect, peppered with occasional smiles and laughter. When focused, Johnson (1984) says of Daniel: "His intent facial expressions suggested severe internal tension" (p. 303).

Johnson (1984) presents a successful case study employing drama therapy techniques that speak to a client considered unreachable by many. He speaks of the discrepancy between the internal and external states of schizophrenic clients, which identifies the importance in

discovering further means of bridging that gap. In addition, Johnson (1984), to some degree, relies upon Daniel's facial legibility, particularly in referencing Daniel's intensity and apparent tension. Johnson (1984) is clearly conscious of the fact that the client may not present in a manner indicative of his inner state, yet is still looking to the face for clues. Facial expressions are that deeply embedded into our interactions: even when we are skeptical of a client's legibility, we still fall prey to our assumptions. For drama therapists, making use of clients' expressions and noting one's presumptions and responses could be parlayed into extremely fruitful therapeutic interventions for this challenging population.

Early beliefs about schizophrenia included the notion that flattened affect was a faithful rendering of the internal state. As a result, one dominant theory suggested, "that schizophrenics' lack of outward expression is due to an inability to experience emotions, at least positive ones" (Kring et al., 1993, p. 507). Early medical model beliefs concerning schizophrenia reveal competing opinions concerning the actual emotional range of those diagnosed. However, there was general agreement that the symptoms central to the ailment were rooted more in emotional blunting than delusions or hallucination (Kring et al., 1993). This historical insight reminds the present day clinician how paralyzing this disease is in its ability to halt natural interpersonal connections as a result of negative symptoms.

The researchers (1993) aimed to further understand emotions experienced by schizophrenic clients. Because individuals with this particular mental illness display incongruous affect, it becomes difficult for many to interpret their behavior. The result is that these clients are frequently alienated, alienating, misunderstood, and isolated. To achieve the desired result, the team exposed schizophrenic clients to different emotional movies and had them self-report their experiences. In particular, two existing theories on the emotional world of schizophrenics were

taken into consideration: a) that emotion exists behind the affect, and is either expressed outside the norm, or expressed at a slower pace, and b) schizophrenics suffer from thorough *anhedonia* (inability to feel pleasure) (Kring et al., 1993).

There were 40 research participants: 20 schizophrenic clients from the Bronx VA and Mt. Sinai, and 20 non-schizophrenic participants. The schizophrenics were all medication free so as to avoid side effects that often accompany these medicines. All subjects were male. All participants watched film clips meant to induce fear/disgust, happiness, or anger. They were then asked to assess characteristics of the film that would allow other viewers to really "get into" the movie (Kring et al., 1993).

The subjects were videotaped while viewing the films, and, as predicted, the schizophrenic clients displayed blunted affect. In general, they proved less expressive than the non-schizophrenic subjects during each type of film. At the same time, the schizophrenic clients actually reported the same, or in some cases even greater, emotional responses to the clips they watched: they had positive experiences of the positive film, and negative experiences of the negative film. The article posits that, based on the research completed, there is validity to the notion that schizophrenics are frequently perplexing to those who interact with them. They are poorly received as a result. Yet the internal experiences of these individuals are rich—it is more a matter of slowed responses to stimuli. To increase the overall quality of life for these clients, social training that incorporates the basics of human connection (eye contact, mirroring) becomes essential (Kring et al., 1993).

Schizophrenics are so often written off as hopeless cases. Almost all of their behavior is pathologized, from praying to singing in the shower. While the layered experience of the schizophrenic should be embraced, this is often not the case (J. Butler, personal communication,

March 25th, 2009). In treatment, many of these individuals are slow to connect, but display an evolution of affect in the form of eye contact, smiling, reactions to jokes, ease of conversation and so forth. In reading this article, drama therapists gain yet another (scientifically based) indicator that the external and internal are frequently incongruent. This article aids in tying in the themes of protecting the client while still acknowledging the reality of limitations that exist (Butler & Gatta, 2009).

In hopes of building upon the above research, Earnst, Kring, Kadar, Salem, Shepard, and Loosen (1996) sought to determine whether the flattened affect exhibited by schizophrenics is complete, or if subtle facial movements are performed. Electrymyographic (EMG) facial activity was recorded during the presentation of emotional films. The effects of medication were taken into account, as trials on the schizophrenic and schizoaffective subjects were conducted both while they were medicated and after they had ceased to take medication under the care of their psychiatrists (Earnst et al., 1996).

The results indicated that some subjects showed very slightly reduced facial action when medicated. In general, the researchers concluded that the negative symptoms of schizophrenia are not counteracted by medicinal intervention. The EMG did pick up slight movements, however, in response to both positive and negative films, which suggests that shifts in expressions occur, but cannot always be detected by the naked eye (Earnst et al., 1996).

Earnst et al. (1996) remind practitioners in the mental health field that the negative symptoms of schizophrenia are of deep importance, and still require new means of intervention that do not rely on medication. In highlighting the fact that minor movements do occur naturally, however, they suggest that it may be possible to build upon a skill that already exists. The job

becomes highlighting and dramatizing those subtle responses and working to build a more proportionate response to stimuli so as to aid in effective communication.

Shaw, Dong, Lim, Faustman, Pouget, and Alpert (1999) continue on this course of study in their reflection on possible etiological explanations for flat affect, acknowledged as fundamental to schizophrenia. The authors suggest schizophrenic clients struggle to recognize facial expression and linguistic intonation, or *prosody*. In order to test the hypothesis, 30 clinically stable, medicated schizophrenic clients were administered one test on affect recognition and two tests on affect expression (Shaw et al., 1999).

The Florida Affect Battery (FAB) tests conducted involved photographs of faces making five different expressions as well as voice recordings meant to indicate different emotions. The Scale for the Assessment of Negative Symptoms (SANS) was given to rate flattened and inappropriate affect. Finally, computerized voice analysis (VOXCOM) was employed to review 20-minute interviews with subjects about happy, sad, and neutral experiences. This last test "is a reliable and effective measure of the negative syndrome in schizophrenia, and in particular to provide vocal markers for ratings of flat affect and alogia" (Shaw et al., 1999, p. 247). Findings showed no relationship between the failure to express and the inability to recognize emotion. Deficits in facial affect recognition showed up in poor *affect attunement*—"the sharing of affective states"—and awkward responses (Shaw et al., 1999, p. 249). Shaw et al. (1999) suggest this difficulty mirroring, may even cause frustration, leading to negative responses.

The article offers additional insight into the nature of schizophrenics' flat affect and the potential for these clients to get stuck in confusion. Of note is the fact that these tests all involve photos and recordings. It is worthwhile to inquire whether the presence of another being might be effective in eliciting some of the desired responses. Or, if in time, exposure to these types of

exercises made creative might effectively aid in educating clients (J. Butler, personal communication, March 24, 2009).

Phillips, Williams, Senior, Bullmore, Brammer, Andrew, Williams, and David (1999) made the decision to create one of the few neurological studies looking into the relationship between flattened affect and brain functioning in the schizophrenic population. Their research begins with a reiteration of the struggles schizophrenics face socially as a result of an impaired ability to both create and recognize facial expressions. The theory was posed that differences might exist between paranoid and non-paranoid type schizophrenics, and the research thus emphasized these variances—specifically that paranoid patients are more able to identify negative facial expressions. This study explored the neural responses to fearful, angry and disgusted expressions using an fMRI in paranoid and non-paranoid schizophrenics, as well as healthy volunteers. Though the researchers' interests lie in negative emotions, positive and neutral emotions were tested as well. The subjects were both scanned and asked to identify the expressions presented to them in still photographs (Phillips et al., 1999).

The results indicated that paranoid clients were more readily able to identify negative expressions than their non-paranoid counterparts. On the contrary, non-paranoid subjects were more capable of identifying positive expressions. In general, schizophrenic clients struggled to distinguish among the negative expressions, and a reduced ability to recognize facial expressions in general. FMRI scans followed suit, indicated that schizophrenic clients experience reduced brain activity when viewing images of facial expressions when compared to healthy individuals. Phillips et al. (1999) theorize that "may reflect underlying deficits in attention, and inefficient processing of sensory information in these patients during performance of the tasks" (p. 26). In addition, the fact that the amygdala did not show standard responses to negative and threatening

expressions suggests the likelihood of impaired emotional reactions to stimuli (Phillips et al., 1999).

This is a valuable study, as one of the few in existence utilizing fMRI technology in relation to schizophrenic clients and facial expression. Future research geared towards understanding the possibilities of drama therapy with this population may proceed along these lines. It would be useful, for example, to engage a larger sample of schizophrenic clients, and incorporate aspects related to facial feedback into the equation. Much research geared towards understanding facial feedback has examined the role of brain functioning and neural imaging in the mimicry of expression, whereas this study stops just short of this tool, so easily employed by the drama therapist.

The quality of life concern. Since the beginning of the millennium, researchers have continued questioning the role of negative symptoms in schizophrenia. Quality of life issues have emerged as psychologists have recognized how pivotal facial expressions are to everyday interactions. This incorporates both the schizophrenic ability to express emotion and recognize affect in others. Penn and Combs (2000) discuss the limitations of inaccurate interpretation of others' emotions, particularly in the social arena. They express concern for the lack of treatment options available to address this issue, and claim "the development of specific psychological interventions focused on facial affect perception is needed" (Penn & Combs, 2000, p. 218).

Their research focuses on pinpointing exact strategies for working with schizophrenic clients in hopes of highlighting struggles pertaining to affect. In order to test the value of monetary motivation, Penn and Combs (2000) offered $0.10 for every correct response on a facial affect identification test. The researchers also tested the importance of facial feedback,

working off the suggestion that mimicry of expression might induce improved affect awareness (Penn & Combs, 2000).

Forty inpatients diagnosed either as schizophrenic or as having schizoaffective disorder participated in the study. Affect recognition was tested using the face emotion identification test (FEIT), which "is comprised of 19 black-and-white photographs of faces expressing six different emotions (happy, sad, angry, afraid, surprised, ashamed)" (Penn & Combs, 2000, p. 219). Subjects were shown the photos and asked to match the emotion to the facial action. This was presented alongside the face emotion discrimination task (FEDT), which required that participants compare two side-by-side photos in order to determine whether the same emotion is represented in each (Penn & Combs, 2000).

The subjects were divided into four groups; each one received a different set of interventions. The first group completed the FEIT using the standard instructions; the second group received a dime after each correct response (monetary reinforcement); the third group was asked to first mimic the facial expression and then name it (facial feedback); the fourth group was given both monetary reinforcement and facial feedback. The tests were administered over two sessions. During the first session, a standard baseline trial was attempted. Next, a trial utilizing the intervention was attempted. Finally, an immediate standard post-test trial was administered. In hopes of determining the longer-term effects, participants were administered the standard test once again during a session one week following the initial trials (Penn & Combs, 2000).

The results indicate that both monetary reinforcement and facial feedback are successful interventions for the creation of affect recognition within a schizophrenic population. Penn and Combs (2000) speak further to the usage of facial feedback with schizophrenic clients:

> In fact, asking persons with schizophrenia to imitate subtly the expressions of others may facilitate social interactions, especially for persons with flat or inhibited affect, whose limited expressiveness can have a negative impact on others (Penn & Combs, 2000, p. 226).

Schwartz et al. (2006) echo previous concerns regarding the diminished social capacity of schizophrenics as a result of flattened affect. The researchers chose to study the value of providing these individuals with real-time feedback as a guide for imitating and modeling facial expressions. They go on to illuminate the serious lack of psychosocial treatment techniques focusing on the face:

> Yet little effort has focused on developing strategies to improve facial expressiveness in these patients. Because facial expressions comprise a key element for effective interpersonal relationships, it is important for people with schizophrenia to develop the ability to convey information nonverbally through facial expression (Schwartz et al., 2006, p. 88).

Twenty psychiatric patients and ten non-psychiatric individuals participated in this study. The study involved five phases. Initially, the subjects were given verbal instructions without the aid of either a mirror or a picture. The guidance was a basic request that the subject make facial expressions indicating the experiences of sadness, happiness, anger, disgust or neutrality. These five options were then placed beside a series of ten photographs of faces, with the instructions that the subject pair up the emotions with the proper photos. During the next phase, individual photos of expressions were presented, which the subjects were asked to mimic. Phase four was a repeat of phase three, but the subjects were permitted to employ the aid or a mirror. Their faces were then photographed once they felt they were imitating the original image. Finally, the last

phase involved a repeat of the initial phase: subjects were again asked to adopt the countenances of sadness, happiness, anger, disgust, or neutrality. These last attempts were photographed (Schwartz et al., 2006)

The results of the experiment indicated schizophrenic individuals struggle to create the facial expressions of emotion when asked. The mirrors used did not seem to aid the clients. However, there was some increase in ability noted from the first phase of the experiment to the final phase, particularly in the expressions of anger and contempt. Schwartz et al. (2006) thus conclude "patients can benefit from exposure to modeled expressions and the *practice* of generating expressions" (p. 92).

The indication, then, is that there is a possibility, with practice, to increase the range of emotion facial action in schizophrenic. Schwartz et al. (2006) discuss the lack of interventions in existence that focus on the need to learn facial expressions, yet recognize the task is feasible. The study puts the drama therapist in mind of the many techniques employed that involve making faces. Certainly, where these techniques do not exist, they could be created with this purpose in mind.

Park, Matthews and Gibson (2008) discuss the struggle schizophrenics face when trying to imitate the faces they see. They (2008) begin by acknowledging the importance of the skill as a tool of empathy—by viewing the actions of another and trying them on as one's own, there is an increase in the ability to extend one's vantage point. The research team posited the notion that treatment plans and interventions are difficult to create for this population, as the ability to assess functionality is often impeded. This is a disease that often leaves clinicians struggling to fully understand the far-reaching nature of the challenges it poses. Park et al. (2008) describe their

desire to frame the schizophrenic struggle as an interpersonal one, and in doing so, conduct research that emphasizes this quality of the disease.

The researchers also reference the role Theory of Mind (ToM)—an awareness of one's own thoughts, feelings and beliefs as separate from those of others—plays in understanding the nature of the schizophrenic understanding of others. ToM is offered through two theories: the *theory theory* (a meta-representational understanding) and the *simulation theory*. These two theories sometimes compete with one another, but can also be viewed as potential partners working together to complete certain required tasks. *Theory theory* suggests that normal mentalizing is the result of the sum of life's experiences (particularly early experiences) that have been collected and are made available when necessary. *Simulation theory* refers to a ToM that allows for the imagined stepping into one's shoes so as to make appropriate deductions and decisions. As per the authors, neither version of ToM has been explored and applied to schizophrenics in a meaningful way, and as a result both *theory theory* and *simulation theory* played a role in the experimental design (Park et al., 2008).

Mirror neurons enter the article as Park et al. (2008) discuss the role imitation plays in *simulation theory* and, as a result, ToM. The hypothesis is made that schizophrenic clients will struggle with imitation, as they apparently struggle with *simulation theory*. Both schizophrenic and healthy participants were asked to complete a hand imitation task, mouth imitation task, and an emotion imitation and identification task. In addition, all participants were rated on the Zigler Social Competence Scale (Park et al., 2008).

The results indicated that schizophrenic clients struggled to imitate hand, mouth and emotion tasks. However, this did not coincide with an inability to identify emotions, indicating that emotions may be recognizable, but the breakdown may occur when the mirroring in social

situations is meant to occur. Park et al. (2008) suggest that, perhaps because emotion identification was preceded by emotion simulation, there may have been some guidance as to which emotions were on display for the subjects, despite the fact that their attempts at imitation did not appear fruitful. (This seems an important question, as this author interprets that to mean a schizophrenic individual attempting to create a facial expression is thus more able to recognize the facial expression in other—certainly a useful piece of information for a drama therapist hoping to guide a client towards more social interaction.) Park et al. (2008) conclude by noting that difficulty imitating correlated with low scores on the Zigler Social Competence Scale. They thus conclude that, "Social impairment is one of the most disabling clinical features of schizophrenia, and it is possible that imitation impairments may be precursors to these social deficits" (Park et al., 2008, p. 704).

Falkenberg et al. (2008) reiterate the point that it is well documented that the mimicry of facial expressions plays an important role in communication. Schizophrenic clients in possession of flat affect have deeply impaired social functioning. They also tend to interpret incorrectly, which is a further problem for successful interaction. These clients have a reduced ability to make happy facial expressions—they are first to recognize negative faces, and least able to make positive faces, which could easily account for the sense of negativity that exists in many clients (Falkenberg et al., 2008).

As a result of this confusion, interaction between schizophrenics and non-schizophrenics is frequently hard to explain, leading to continued feelings of isolation for both parties. Even therapists can find themselves struggling with clients whose affect is such a strong departure from the norm. It should, however, not be ignored that the patients still have emotional abilities that might be open to external influences and improvement. Falkenberg et al. (2008) suggest the

lapse likely has to do with a breakdown in the mirror neuron system and thusly a halting of the cycle of emotional contagion that occurs when two people meet.

As indicated above, our emotions affect one another through the cycle of emotional contagion: we perceive the other, internalize the other, experience the other, and reflect the other. Schizophrenic clients struggle to do this. This particular test has patients look at pictures of faces showing different emotions and first mimic the expression, and then present the dissonant expression. Repeatedly, schizophrenic patients were unable to properly recognize and label the faces, increasing their frustration. Again, negative emotions proved to be the most recognizable expressions available to the clients (Falkenberg et al., 2008).

The importance of this reading lies in the fact that it offers a glimpse at the frustration of clients who are unable to interpret what is generally understood to be legible affect. This not only offers depth to the question regarding legibility, but also opens up questions about the worth of therapies (like drama therapy) that aid in the evolution of facial affect. As the clients are left isolated and frustrated, the ethics of a clinician seeking to better the clients' lives come into question on several levels. Is it more important to catch the client up with society, or catch society up with the client? And how can drama therapy provide answers in a manner that respects both vulnerable and empowered clients as they seek an improved quality of life?

Moving Forward

A Question of Ethics

Our faces are our badges. They may display those battle scars that give us pride, or leave us wounded and discarded as less than second-class citizens. Any discussion of therapy intended to focus on the face of schizophrenia, then, must include attention to the bedside manner that accompanies such sensitive dealings. For these reasons, it will be of continued importance that a critical eye be cast toward those delicate tasks intended to "improve" the client's outward expression of emotion. By acknowledging that our patients have human struggles that require kind, careful responses, empathy can help prevent an onslaught of thoughtless treatments that fail to address the needs of schizophrenic clients in an affect-obsessed society.

Drama therapists have the task of bringing about an awareness of the client's affect without giving the impression of either mocking or demeaning. In her book, *Staring*, Garland-Thomson (2009) discusses concerns surrounding attempts to correct the legibility of affect in individuals with anomalous appearances. Faces that are considered non-normative because of physical deformities—conjoined twins, survivors of various ailments—any number of "professional starees", as Garland-Thomson (2009) calls them, are given the chance to voice their experiences of either trying to fit in or claiming ownership of their otherness. From empowering anecdotes to questions regarding the modern day freak show, Garland-Thomson's (2009) tactics manage to provide a glimpse into a world rarely viewed as anything other than a novelty. The book draws further attention to reliance on the normative/non-normative binary, leading to an acknowledgment of mental illness that manifests as startling affect ("professional starees" less frequently discussed). Again we are reminded that addressing a client's face is a most delicate matter requiring keen attention to the drama therapist's ethical standards.

There have, after all, been examples throughout history when studies of affect, so susceptible to misinterpretation and callousness, have appeared more focused on research than respect. According to translator Cuthbertson (1990), for example, a questionable morality comes into play when we look to Duchenne's subjects. The models Duchenne used included a blind woman, a child, an opium addict who died two days after being photographed, and an elderly man with facial paralysis. "Their faces peer out as vulnerable individuals…anticipating Diane Arbus's work on freaks…There is a certain voyeurism in Duchenne's Album that seems…to be only thinly veiled by the scientific inquiry" (Cuthbertson, 1990, p. 225). This insight translates into the need for healthy and safe client/patient relationships that accord proper respect to all parties involved.

Virginie Liberatore (2001) further elaborates on Duchenne's illumination of what he believed to be the soul's writing on the face, pointing out the potential for misattribution. "Duchenne infers from what he himself causes to become present to view with the end already in mind" (Liberatore, 2001, p. 80). Liberatore (2001) casts doubt on the notion that facial expressions fall into an interpretable taxonomy, proposing that Duchenne's assumptions regarding the legibility of an affect he creates must be located within the larger cultural context of the time. Liberatore (2001) posits that the 19th century use of physiognomic logic and anthropometrics fail to provide any basis for the assumptions made regarding internal experiences of the patients. Duchenne's reflections betray a creationist point of view—he has placed himself at the helm—acting on behalf of a soul confined to a sick body (Liberatore, 2001).

There seems no better description for the assumed legibility of facial affect by the presumptuous clinician than Liberatore's account of Duchenne. He makes no hesitation in

labeling different facial expressions, all of his own manipulation, as thus or thus, only to record his experiments for public consumption. Once again, a reflection on this work indicates the ways in which artistry is a natural complement to the sciences, while at the same time addressing the importance of delicately handling such a potent combination (Liberatore, 2001). Employing such techniques without establishing a relationship that protects both therapist and client could lead to poor reflections on both (Liberatore, 2001).

There are those drama therapists, however, who have taken into account the worth of the field in addressing affect. By making note of the mulish expectations of normative affect, Jones (2008), for example, makes the case for drama therapeutic interventions if not to normalize (in the case of the schizophrenic body) then to address and revise. Reflections on confining societal constructions lead to the value of creative arts based therapy that allows for exploration outside these norms. Changing narratives, daring roles, meaningful caricatures: all these present opportunities to deconstruct that which stifles, utilizing a body that betrays what language cannot. Drama therapy is offered as reflective of the human condition in light of a primal need to locate and define the self (Jones, 2008). Through an emphasis on an expanding role repertoire, embodied play, and the development of spontaneity and creativity, drama therapists provide concrete opportunities to break away from the notion of fixed personhood, however it manifests (Jones, 2008). Though Jones (2008) does not specifically refer to the schizophrenic client, his emphasis on the importance of a safe and transparent relationship between patient and therapist when delving into matters of aberrant affect seems well suited to this population.

Drama Therapists, Affect, and the Schizophrenic Population

Drama therapy represents a progressive intervention that needs to be incorporated into the standard treatment program for schizophrenic clients, as the modality permits clinicians to

address a substantial problem in a unique manner. The particular techniques employed by those in the field offer a number of avenues for ministering to both the positive and negative symptoms of the disease—something most other interventions cannot boast. The challenges met by individuals who are unable to create and correctly interpret facial expressions are many and varied. Though articulated repeatedly by researchers, such deficits have not yet been met by clear-cut solutions. Drama therapists offer the application of the research, bridging the gap between what researchers desire and what therapists achieve. Theory may become practice as the ability to creatively employ techniques that focus on evolving the range of expressions employed by schizophrenics is significant in the search for new interventions intended to help this group heal.

Of note, however, is that, throughout this paper, "drama therapy" has been casually used as an umbrella term. In actuality, drama therapists utilize a wide range of techniques when practicing. There exist many significant specializations within this specialization, and not every practitioner within the field will find the goal of "an evolution of facial affect", as this author has phrased it, applicable, possible, or even desirable. While space does not permit a thorough discussion of the true scope of drama therapy's many incarnations, the desire exists to explain some applications and implications of the materials presented thus far. These next pages offer some discussions concerning specific methods of drama therapy and their valuable role in treating the schizophrenic client. Issues addressed include notable overlaps in theory, the natural relationship between studies of affect and specific techniques, and fresh interpretations of methods that take advantage of existent research.

Makeup and masks. It is possible to work with the face by layering on—adding new strata to the elemental rawness of the countenance. Breitenbach (1984, 1987) and MacKay

(1987) look to the use of makeup, sculptural masks, and painted masks in drama therapy sessions to enhance creative work already being done. Breitenbach (1987) reflects on the dual power in providing an individual with both makeup and mirrors. In drawing attention to the face, she explains, clients may

> Learn a lot about who they are, who they would like to be, and how they feel about themselves as well as how they are perceived by other people…This is possible because by tacit agreement the mirrors, like the faces which come to life, are not endowed with any special meaning (p. 313).

In this manner, participants are given the opportunity to play with their facial quirks and characteristics in a shielded, contained manner. The addition of the makeup provides an object of concentration. The reflection in the mirror serves more as a tool providing an artist's canvas. In essence, a certain buffer is possible, as the task of doodling on one's face becomes the central object of attention (Breitenbach, 1987).

Though mirrors have factored in prior studies of schizophrenic facial affect (Schwartz et al., 2006), Breitenbach (1997) notes that reflections may pose a threat to some clients. Schizophrenics may not mind applying makeup to their faces, but may struggle with the presence of a mirror. Distancing techniques are possible, as the reflection need not focus directly on the client. It is possible for the client to positions the mirror so that it faces the therapists or for the therapist to join the client in the mirror, offering a sense of partnership. At times, these variations offer the necessary perspective to allow the client freer exploration of the medium (Breitenbach, 1987).

In using makeup, a number of benefits become apparent for the schizophrenic client, who

frequently struggles to remain connected to the body (Butler, 2009). As an extremely tactile medium, pleasure may be derived from the mere act of exploring the sensate qualities of cosmetics. Texture; fragrance; the visual allure of a vibrant palette: each of these may serve to pique interest. The experience of the application may further ground the client, as the character being created takes form (Breitenbach, 1984).

This is storytelling at its most primal. When first there were theatres and ritual, there were masks and makeup. These external indicators of role display agreed-upon markers of gender, class, and personal characteristics. From commedia del'arte performances to Native American celebrations, there exists a long history of face transformation that drama therapists can presently translate into the fact that "both face painting and sculptural masks are used so that the security of the mask disguise and the mask role may allow clients to express themselves more fully and more deeply" (MacKay, 1987, p. 193).

Both masks and makeup place attention on varying facial attributes in a way that permits playful scrutiny. By looking to the creation of roles either through the mask or by applying makeup, characters may emerge who exhibit expressions that differ from the client's own, a benefit that Keltner et al. (1999) identify as necessary for mental health. Drama therapists may find clients more capable of pinpointing emotional expressions through a slow process of education and experimentation that takes place on the projective devices of sculpted or painted masks. Makeup and masks may be used to exaggerate, and offer examples of expressions the client may wish to better recognize, or more frequently attempt. This exaggeration, it is suggested, is more aligned to the manner that the brain processes facial characteristics, making it possible for schizophrenics to engage in a creative means of exercising their primary processes in bold shapes (Ramachandran & Hirstein, 1999). Through thoughtful attention to the needs of the

client, a therapist can develop a course of treatment that expands role repertoires both emotionally and physically through the guided usage of painted or molded faces. It becomes evident that by employing both masks and makeup, a different possibility arises for the direct yet protected focus on the face. Clients are given physical permission to explore in a manner that is non-threatening—something important to the success of interventions with any client, but certainly schizophrenic clients (Phillips et al., 1999).

Sculpts. As evidenced by Schwartz et al., (2006) facial posing has the potential to serve an important role for schizophrenic clients who struggle to make expressions. By engaging in these poses, participants can slowly learn more about the role expressions play, when to engage in them, and how to interpret those of others, offering a worthwhile form of social-skills oriented psychoeducation. Clients can gain insight into the range of expressions they are in face capable of making, and learn more of the musculature of their faces.

Generally, sculpts are employed with the intention of capturing a single moment, emotions, or character for a client (Johnson & Lewis, 2000). This kind of specificity can be comforting, as the many varieties of stimuli that affect a schizophrenic individual may be difficult to identify without guidance in whittling away the excess. Yet by employing the intrinsic nature of these exercises: in essence, offering a "freeze-frame" of something meaningful, schizophrenic clients have the potential to determine what has been physicalized and why. This can be utilized in any of several ways. In Psychodrama, these sculpts become important as the primary participant, whose story is reenacted, takes the time to pose others in a manner that best behooves those characters in the drama (Sternberg & Garcia, 2000). Playback Theatre engages storytellers who see their narratives captured by performers who act as witnesses (Salas, 2000). Such exercises provide schizophrenic clients with needed opportunities

to overcome deficits in externalized manifestations of empathy, so important to social interaction (Hatfield et al., 1993; Penn & Combs, 2006; Lee et al., 2006). Clients may be asked to perform in sculpts, taking on the prescribed characteristics at the request of the therapist or another client can connect and reflect back sentiment. Those who direct sculpts can position others as they see fit, physicalizing their notions of expressions and taking ownership of their interpretations. Additionally, clients may serve as audience members, observing the sculpts as they are being directed and embodied by others, naming what they notice and why certain choices have been made (Boal, 1995; Salas, 2000; Sternberg & Garcia, 2000). In each of these scenarios, the opportunity exists to make additional connections between emotions, social situations, and their corresponding facial expressions. By holding still in these positions, the schizophrenic body may begin to experience some of the emotional benefits in a contained manner (Schwartz, 2006).

Role Theory and the FACS. In studying the work of Ekman and Friesen (1976), one thing becomes abundantly clear: the legacy lies in the taxonomy created. The FACS is first and foremost a thorough depiction of emotion as it plays out on the facial canvas. Ekman himself, as a man in possession of the gift of expression, poses in any number of the photos. It becomes clear that the research he has done has been in part to organize the world around him, and in part to place himself within that world (Ekman, 2003).

From studies throughout the entire world intended to acknowledge the commonalities of expression, to the focus on genuine happiness, these depictions are meant to offer unique insights into aspects of the self. This is no simple, classifiable dictation, but rather the result of extensive research into the manifestation of humanity. And from this desire to encode, came the dedicated studies of many followers, building upon, challenging, and modernizing the system created by their mentor.

Robert Landy, the creator of Role Theory, is similarly known for placing himself at the center of his research. He, too, found the notion of a taxonomy alluring, and in 1993, published "a systematic view of many of the potential roles available to be taken on in theater, therapy, and everyday life" (Landy, 2008, p. 105). In much of his work, Landy (2008) chooses to reflect on his own experiences with roles in order to more thoroughly educate readers on the subject. In creating the taxonomy, Landy acknowledges an extensive search through innumerable texts. He refers to Jungian archetypes, ancient texts, and characters that show up in every language, in every culture, on every continent. Again, we see the desire to speak to the many facets of a human race, while reflecting upon the myriad countenances worn by the individual (Landy, 2008). In discussing the importance of role, Landy (1993; 1994; 2008) addresses the need for healthy individuals to create an expanded role repertoire in order to attain optimum mental health (Landy, 1993). Landy (1993; 1994; 2008) reflects on the importance of shifting from one role to another, rather than playing the same role over and over again.

Repeatedly throughout this paper, the research reviewed has indicated the importance of a well-evolved affect. Limited facial expressions are indicated as the root of poor interpersonal skills, stunted social growth, and restrained coping mechanisms. In addition, the ability to try on these different faces has been suggested as a source of potential growth (Keltner et al., 1999; Schwartz et al., 2006; Falkenberg et al., 2008). Drama therapists speak frequently to the importance of playing many roles throughout life's varied circumstances (Landy, 1993; 1994; 2008). It seems these two ideologies are speaking to the same issue—the taxonomies are rooted in standardized expressions of identity. Where Landy (1993) explored literary sources, seeking out those personas that made the most appearances, Ekman (1993) employed pictorial sources, seeking out those facial actions that most frequently surfaced. Yet there is an undeniable

similarity in what is being said: there is tremendous promise in a full range of expression. Drama therapy is therefore in step with leading trends in the field of psychology, and this alignment makes it a medium suited to tackle issues of schizophrenic affect once relegated only to mainstream forms of treatment.

In practice, it is interesting to juxtapose the taxonomies. The photos that are supplied with the FACS vary in the emotions they depict, and therefore vary in the emotions they tend to elicit. A therapist seeking to work on a schizophrenic client's affect might incorporate these pictures into the role taxonomy. The FACS pictures could be offered up as roles, with the client in control of which role is applied to which photo. From there, the client could then complete a role profile, choosing which roles s/he was, is, and hopes to become (as an example). Drama therapists might also guide the schizophrenic client in mimicking the expressions in the photographs, labeling the emotions along with roles they represent from the taxonomy. Schizophrenic clients could tell a story utilizing the different roles, again mimicking the expressions along the way. As an alternative, a client might focus on one expression from the FACS at a time, but develop the associated role more thoroughly. Again, a story could be created around the character, with emphasis on the expressions the character makes at different points in the story, and why.

Tremendous variation is possible in this series of exercises, with the goal being an emphasis on evolving facial affect in a manner that draws upon the strengths of role theory, role taxonomies and the FACS. One of the great benefits becomes the combination of visual alongside verbal and physical that would occur in such treatment, much to the benefit of the schizophrenic client who is not likely to engage in these mixed activities without encouragement (Schwartz et al., 2006; Falkenberg et al., 2008).

There are possible limitations, however. Therapists may be hesitant to introduce any visual depictions of characters to the role taxonomy, in hopes of avoiding any suggestion as to what the roles look like—there are those practitioners who believe the roles should be completely determined by the client and a photo might serve to influence decisions. If this is a concern, it may be more appealing to do the role profile and storytelling assessments as per usual first, and then introduce the photos during a second round when the goal is different. Additionally, the FACS photos can be introduced without the role taxonomy, and the client can come up with specific names on her/his own.

The goal in acknowledging the interrelatedness is two-fold. First, it opens up possibilities for drama therapists seeking specific treatment goals in the form of improved social interactions and extended range of expression. In placing value on theories aimed at expanding this critical skill, drama therapists can put their extensive knowledge of theatre, psychology, and the potential for resultant social training to use. The second goal is the possibility of awakening those in possession of somewhat limited theory—there have been, repeatedly, limitations named in researchers' desire to find effective interventions for clients who suffer as a result of flattened affect—to the variations that exist in treatment option. These individuals frequently speak to the need for creating a methodology that evolves facial affect in an ethical and supervised manner. The FACS as a complement to role theory certainly merits further consideration as drama therapists are responsible for the creation of treatment protocols for the schizophrenic population.

Developmental Transformations and emotional contagion. Practitioners of DvT value it greatly for any number of reasons: its emphasis on transparency, its roots in a complex and constantly shifting set of interdisciplinary theories, its appreciation and regular use of humor.

How do these qualities apply to existing research on facial expressions, and specifically, to the schizophrenic client?

Falkenberg, Klugel, Bartels, and Wild (2007) posit that schizophrenic clients possess humor and benefit from exercising this natural social and life skill. In incorporating therapeutic techniques geared towards the development of such skills, these individuals are thus able to draw upon this coping mechanism during adverse situations. In their letter to the editor, Falkenberg et al. (2007) reflect on a pilot study (one of the very few studies on humor in schizophrenic clients) and discover that diminished signs of the trait appear to be more indicative of depression than schizophrenia. Falkenberg et al. (2007) go on to suggest that

> the relatively reduced reaction of patients with schizophrenia to humorous stimuli…has less to do with an alteration in the patients' "sense of humor" than with more global deficits…or with their known dissociation between reduced facial expressions and normal self-reported emotions…These findings would tend to encourage those using humorous interventions in patients with schizophrenia (p. 260).

The flexibility of DvT and its intrinsic use of "insight, humor, acceptance, forgiveness, and 'oh, well!' fits well into the type of approach endorsed above" (Johnson, 2005, p. 20). The transparency involved in a modality that seeks to acknowledge the struggles involved in reality based flaws and fears promotes the success of the schizophrenic client able to practice new responses in a contained playspace (Johnson, 2005). Additionally, utilizing DvT means a willingness to address affect head-on, naming what one sees and senses and moving toward increased empathy. "A poor drama therapy…values the possibilities of the unadorned encounter between a therapist and a client in the playspace, where the world of imagination with all its

contradictions and mysteries can be revealed through the embodied play" (Johnson et al., 1996, p. 297). DvT, which is reliant on the movement of mind and body, serving almost as embodied mindfulness or stream-of-consciousness, employs a bare-bones approach that can provide the benefits of real-time feedback researched by Schwartz et al. (2006) (Johnson, 2005).

Jason Butler (personal communication, March 25, 2009) suggests it is worth examining the stages of emotional contagion as compared to the recursive cycle in DvT. Emotional contagion is understood as a process involving, a) perception – "of other people's movements, facial expression, postures, or vocalisation", b) mimicry – "imitation leading to a sychronization of movements", c) feedback – afferent feedback that results in the internalization of experienced, d) emotion (Falkenberg et al., 2008, p. 246).

The recursive cycle, as explained by Johnson (2005), also involves four steps of connectedness. These are, a) noticing – an awareness of difference, b) feeling – an internal response to that which has been noticed, c) animating – the body's reaction to feeling, and d) expressing – some form of communication to the other (Johnson, 2005).

These two cycles are clearly connected in the way they acknowledge the perpetual back and forth of every interaction. As theories of communication that are so easily twinned, it becomes possible to argue the success of DvT from the context of emotional contagion and vice versa. Another noteworthy correlation between DvT and studies of the face is revealed in the term "leakage". Johnson (2005) addresses what he refers to as emergent images and rendering in the DvT playspace. This phenomenon occurs when an image has been defined by a member of the group, but not yet expressed. These fully formed images "leak" into the existent scene despite the fact that they may not seem to fit into the current play. Clients often experience this with a sense of surprise—perhaps even the notion that their minds are being read. This is

indicative of the intimacy developed between practitioner and client, and can act as a reminder of the attention being devoted to those participating in the play (Johnson, 2005).

Leakage is also discussed at length in Ekman's references to microexpressions. In highlighting an individual's attempt to conceal an already-formed emotion, aspects of the truth emerge in brief facial revelations. Significant parallels exist between the individual ideas of attentiveness—so much so that it feels as though minds are being read when microexpressions are accurately interpreted. In actuality, microexpressions are entirely reliant upon the physical manifestations of leakage described by both Ekman (2001) and Johnson (2005).

As one of the greatest difficulties facing schizophrenic clients is an ability to convey the layered experiences of their inner world, it is of note that drama therapists, in using alternative means of expression, are often able to reach these individuals (Johnson, 1984; Phillips et al., 1999; Falkenberg et al., 2007; Falkenberg et al., 2008). While the efficacy of drama therapy is not always understood, this seems relevant. When clients both process and express information in ways different from the norm, they require therapists with the tools to adapt.

Greta Schnee (1996) speaks to the value of DvT as, in part, a form of social training for the homeless mentally ill, by reflecting on the need to employ methods of therapy that acknowledge and name affect. Schnee (1996) discusses the disengagement of these clients and the challenges of treating such a population, making connections between the methodology of drama therapy and goals of social reengagement. Schnee (1996) begins by describing predominant qualities of those living on the streets, in stating that homelessness is "best viewed as the end result of a long process of disengagement and disaffiliation" (p. 53). There is a sense of isolation and deep mistrust that pervades the homeless community. Psychosis only adds to the alienation—hallucinations and delusions often create internal connections that are not felt by the

outside world (Schnee, 1996).

Schizophrenia is the most common diagnosis in homeless shelters. This particular illness brings with it such extensive and jarring manifestations of symptoms that the desire to avoid society is often reciprocated. In addition, problems with boundaries—an inability to determine the difference between self and other—surface. As Schnee (1996) goes on to describe DvT, she emphasizes the importance of a therapy that incorporates the therapist as the primary player (or play object) and taker of risks. Simple sound and movement tasks involving observing and mirroring work well for clients who struggle to express themselves through standard language (Schnee, 1996).

Schnee (1996) goes on to describe the use of this "playful", improvised form of drama therapy to create an increased tolerance of affect. By using imaginary objects, animals, and individuals to engage in new experiences, schizophrenic clients slowly learn to bear strong emotions. Themes and feelings slowly emerge where there has only been blockage. Schnee (1996) then presents a case example from her work at Bellevue Hospital's homeless unit. She takes the reader through the different stages of a DvT group, pointing out various interventions intended to support, engage, and gently challenge the clients.

Schnee's (1996) varied interventions, are exemplary of the way drama therapy can increase affect in deeply isolated, schizophrenic clients. For example, when the therapist engages in play with clients and acknowledges what's in the room, including the power dynamic, it is feasible to gently work towards in depth interpersonal connections through increased affect: shared smiles, eye-contact, storytelling, even specific attention drawn to responses that seem disproportionate or flattened.

Perhaps Butler (2009) is able to clarify the connectedness between DvT and the feasibility of the evolution of facial affect in the schizophrenic client through reflecting on the essential symptomatic manifestation of the disease:

> Schizophrenia, then, could be seen as a disorder of embodiment, encounter and transformation. At its very core, schizophrenia is a disease that negatively influences an individual's ability to connect with [his/her] own body and to be fully present…This disembodiment separates the individual from the world…preventing them from fully experiencing life (p. 12).

Rasa and containment. Ramachandran and Hirstein (1999), address in their article "The Science of Art", the desire to understand what makes art function as they reference the *rasa*, a word that "appears repeatedly in Indian art manuals and has no literal translation, but…roughly means 'the very essence of'…the *rasa* of childhood…the *rasa* of romantic love" (Ramachandran & Hirstein, 1999, p. 18). Ramachandran and Hirstein (1999) elaborate on their interests, questioning what biological functions are served by art, and how the brain responds to it. It should be noted that Ramachandran and Hirstein (1999) use the word *art* to refer to the visual arts: paintings, sculptures, and drawings. They further address the appeal of the topic as an interdisciplinary one intended to spark conversation among biologists, physiologists and artists (Ramachandran and Hirstein, 1999).

Ramachandran and Hirstein (1999) enumerate eight principles that link the evolutionary and functional qualities of the brain to qualities evidenced in art. These all tie in to the *rasa* of experience—the essence of emotion as interpreted by humanity. One such principal calls upon the *peak shift effect*, by which the brain latches on to those visual qualities specific to a person,

place, or thing in its extreme form. The idea is illustrated through a discussion of caricature: viewers respond to the exaggerated appearance of Richard Nixon's caricature because it is a heightened Richard Nixon (Ramachandran and Hirstein, 1999; Erskine et al., 2001). Ramachandran and Hirstein (1999) further emphasize the quality of caricature that exists in much art—depictions of the female form with impossible proportions, perhaps even devoid of a head or limbs, yet undeniably female—a "mnemonic component of aesthetic perception" (p. 20).

This quality of arts in science is further discussed in the evolution of facial expression. Those expressions that were once known to our primitive selves as the precursor to attack are now recognized as anger. Recognition of intent in others can lead, thusly, to the ability to empathize with the other. These processes play out in the viewing of art as the body and mind become engaged in the pictorial story, whether consciously or otherwise.

Richard Schechner (2001) employs the concept of *rasa* in his discussion of *rasaboxes*. This creative intervention, Schechner (2001) explains, finds its roots primarily in *rasa theory* as presented in Bharata-muni's *Natyasastra* when paralleled to Aristotle's *Poetics*. The *rasa*, as indicated above by Ramachandran and Hirstein (1999), is understood as the essential experience of a thing. Original *rasa theory* presents eight such experiences, explained by Schechner (2001) as: a) desire, love; b) humor, laughter; c) pity, grief; d) anger; e) energy, vigor; f) fear, shame; g) disgust; h) surprise; wonder (p. 31). These *rasas*, it is noteworthy, overlap substantially with the accepted enumeration of basic human emotions presented in contemporary social and biological psychology (Ekman, 1971; Ekman 1973; Erskine et al., 2001).

In Schechner's *rasaboxes*, a large grid is outlined on the floor, three rectangles wide by three rectangles long. Each box is labeled with one of the *rasas*, as clients are told that, within each box, exists their current experience of the words contained therein. The participants are then

asked to explore the spaces, indicating their reactions to each of the *rasas* as they see fit. This may include sound, movement, drawing, silence, or any action (or inaction). The worlds created may be deeply insular, but room exists for the connection between group members as emotional representations act off of one another. This compartmentalization of experience allows for both a powerful delving into the realm of specific *rasas*, and a movement towards comprehending the complexity of interrelated feelings (Schechner, 2001).

Here lies a drama therapy technique that can easily be connected to powerful research. By isolating emotions, discovering them in containment, and enjoying the guidance of a trained therapist, clients can slowly learn new ways to express themselves. Schizophrenic clients, whose responses may be slowed, can benefit from a treatment intervention Schechner (2001) emphasizes as open-ended. A practitioner may use the notion of *rasa* in working with clients in a variety of manners. The exercise described above may be left as is, but the therapist may choose to factor in further emphasis on facial expressions incorporated into the experience of the *rasa.* It is likely that facial expressions would emerge naturally, however those clients unable to clearly connect internal experiences with external reflections would benefit from guidance in this capacity. While Schechner (2001) does not believe in the importance of processing post-activity, it may serve the schizophrenic client to do so. In this manner, further reflection upon the nature of emotional responses and interactions can emerge.

Training the Drama Therapist

Tests have been designed to train professionals in both the FACS and microexpressions. Arguably, it would be worthwhile to the drama therapist to become familiar with such tests. Ekman (1998) has created short and long form instructions that can be completed on the internet. This Microexpression Training Tool (METT) provides narration over brief films of men and

women making classic expressions of emotion. The actors vary in age and race, in acknowledgment of the universality that has etched the same facial actions over every countenance. Detailed explanations and distinguishing characteristics are provided for the seven basic emotional demonstrations Ekman (1993; 2001) identifies: joy, sadness, anger, contempt, disgust, fear and surprise. The testing portion then presents neutral faces with brief flashes of microexpressions the trainee must correctly identify. These exams are then scored in detail on a 100-point scale, with statistics provided as to which emotions the trainee successfully (or unsuccessfully) names. Those who score above 80% receive a certificate of completion. Those who receive as score of 95% or above are awarded certificates of expertise. The FACS can also be studied by purchasing educational tools incorporating the full range of facial photographs. Again, explanations are provided as to the meanings behind each expression, as well as which coded parts of the face engage to create the expression.

The option would then arise to apply new knowledge to therapeutic practice with schizophrenics, imparting such information to the client when appropriate as part of his or her psycheducation. Treatment choices would then be grounded in detailed understanding of existent research into the field, including those bodily systems that play a role in facial expressions. There is also value in further understanding the ways patients communicate non-verbally, especially when working with a clientele that veers off the expected path (Johnson, 1984). In theory, part of a therapist's job is to play the keen observer to what a client says and how it aligns to what he or she does. By delving into the topic of facial expressivity, affect and schizophrenia, drama therapists can only find new and exciting ways to build upon the efficacy of their profession.

Conclusion

Signs of the Times

Drama therapists, as professionals typically matched with underserved clients, find themselves frequently working with often-overlooked schizophrenics (personal communication, M. Hodermarska, July 2008). For a population so often misunderstood, these individuals come into contact with a gift in the creative arts, as therapists give clients permission to seek and stumble along a non-linear, non-verbal path towards expression. These explorations, however, are more than just cathartic—though catharsis is certainly a beneficial part of the experience. Drama therapists invite schizophrenics to look into the faces of those around them and make connections that once seemed impossible. A diagnosis that leaves others with the impression that an individual neither experiences nor responds to a wide array of emotions has the potential to be a crippling force. The additional barriers created by the depression and frustration that accompanies these symptoms is considerable (Falkenberg et al., 2007; Falkenberg et al., 2008). For years, these empirical problems that may serve as the primary identifiers for schizophrenia were left ignored as clinicians moved in pursuit of remedying positive symptoms. Flattened affect and poor social skills were taken as the lesser of many potential evils.

Yet a slow shift has been occurring these past decades, as "affect" has become a buzzword in light of the startling increase in cases of autism (personal communication, M. Paddock, September 11, 2009). Questions and concerns about therapies that evolve facial affect have left myriad parents with heightened awareness of this once-esoteric topic. A desire to understand the inner workings of outer expressions has moved many toward the distinct belief that those in the healing professions must think outside the box if they hope to see substantial improvements. Whereas schizophrenia might not gain the same press that autism does, both

diagnoses bring about the disquiet of mystifying affect.

Additionally, in a post-9/11 society, it is interesting to note the new direction studies of affect have taken. It has become more than pathologizing with the intent of rectifying. Rather, facial expressions serve as possible markers of guilt, betraying the criminal intentions of potential assailants, miscreants or terrorists. The ability to correctly interpret facial expressions has been emphasized as a gift for those hoping to gain a window into the minds of extremists with the desire to kill. Trainings are conducted all over the world in hopes of preventing future attacks by recognizing individuals expressing everything from the violent disgust that precedes such assaults to minor indicators of distress (Abumrad & Krulwich, 2008a). Questions then emerge concerning how schizophrenics, as possessors of unexpected facial affect, can fit into the mold and not get terrorized in turn. In truth, they become easy prey.

The fact is a legibility of facial affect has become marketable to individuals seeking to read the intentions of every possible criminal—the suggestion being that correctly interpreted expressions can help one prepare for or prevent dangerous actions. A magical quality has been attributed the notions of the FACS and microexpressions, as there is tremendous allure in believing the arch of an eyebrow or the lilt of a gait could prevent mass murder. To an extent, there is a new sense of hope—when lie detectors and X-ray machines fail, we can read minds based on facial expressions. The flip side, of course, is that blame can be accorded comfortably with an organized sense of entitlement.

This is not the first time that studies of the face serve as indicators of the prevalent cultural zeitgeist—a fact drama therapists may look to when deciding whether such work is of the times. Looking at the focus of facial studies, one may be startled to see examples of scientific artistry that maintain a finger gently tracing the shifting pulse of the globe. Indeed, facial

expressions and their relation to emotions have been studied for centuries. But it is interesting to note the direction of these educational spheres as they peaked. It is feasible to witness the unfolding countenance of a rapidly evolving world.

When the United States was first beginning to embrace a world beyond its borders, Ekman gave a face to the rest of Earth's inhabitants (1971; 1973). In looking for signs of universality, he mirrored the "tremendous change in America…from a very Eurocentric nation to one that gained interest in other cultures. The Vietnam War drew attention. Immigration changed dramatically. Nixon's trip to China was very influential" (personal communication, D. Gatta, July 26, 2009). As the world simultaneously shrank and expanded, universality and thorough codification became desirable, as evidenced by the desire to see the human face in different shades, on different terrains, and amidst different languages.

Upon determining standards of expression that span the globe, interest turned towards the detection of concealed emotion and deceit. This research seemed to begin shortly after the Watergate scandal and the introduction of a new global skepticism in the wake of an unsupported war, a highly publicized presidential impeachment, and violent battles for equality. While President Reagan's glossy charisma offered a stark contrast to the awkward countenances of his predecessors, there were still plenty of wary Americans (Garland-Thomson, 2009).

On the other hand, all of this attention to affect is paired up with a renewed interest in simplicity—a response perhaps to the fast moving age of technology that is outdated before the packaging has been opened. As we live in a time when the most primal need for safety feels impossible to achieve, individuals look to the gifts of natural and back-to-basics solutions. Liposuction may have met its match in yoga. Chemical cleaners are replaced with homemade

versions once used by grandmothers. Organic and local foods are the hottest trends—despite the fact that everything was organic and local up until about 75 years ago.

The creative arts therapies can take advantage of this hybrid move forward towards stepping back. Whereas Americans once behaved as the invincible teenagers of the world, a sense of mortality has reared its head, and with it has come a new search for meaning. Maybe Oedipal interpretations can gently shift into the realm of artistic embracement, and pharmacological solutions can find support in something as wholesome as acting out a new role and trying on some funny faces. Perhaps this is the next part in the journey for understanding facial expressions. This is an oversimplification, to be sure, but there seem to be any number of social, political, and psychological stars aligned at the moment on behalf of drama therapy and the power of expression.

For the schizophrenic client, who is frequently given heavy doses of modern interventions, drama therapy provides an alternative that is more than healing—it is also pleasurable. Therapy that works need not be painful, and clients are more likely to attend when they enjoy the tasks involved (Butler, 2009). At the same time, research described in this paper indicates that drama therapy seems to fill in a significant gap in current treatment plans for this population. Researchers highlight the need for social skills training that incorporates attention to the face, stating it is currently non-existent, yet pivotal to personal growth (Penn & Combs, 2000; Schwartz et al., 2006; Falkenberg et al., 2007; Falkenberg et al., 2008). Others find fault with traditional attempts at talk therapy, as schizophrenic clients benefit from tasks that allow them to express themselves in the manner they are most comfortable (Johnson, 1984). And clinicians find that when the mind has not quite caught up to the needs of the body, the body can send messages to its outer regions through elegant biological systems (Ekman et al., 1983; Earnst

et al., 1996; Lee et al., 2006). All these factors point to drama therapy not as a luxury, but as a necessity for the schizophrenic client seeking to achieve an improved quality of life.

Limitations

It is important to reiterate the fact that there is still much to be done in order to explore the connections between the fields presented within this thesis. Indeed, past research does indicate that there is reason to assume that further, directed studies of facial affect and drama therapy within the schizophrenic population would yield important results. However, moving forward, it will be necessary to conduct both short term and longitudinal tests with the consent of healthy and schizophrenic clients. These studies would include fMRIs, monitoring of the heart rate, skin conductibility, self-reported and observed experiences and oxygen flow during drama therapy sessions emphasizing facial expression.

Of note is also the fact that information presented takes certain client qualities for granted. For example, the importance of facial expressions relies heavily on clients who are sited. Additional interventions, probably better enumerated by experts with this population, would be necessary for those with visual impairment. Also, it has been assumed that schizophrenic participants and their therapists are able to create facial expressions without the hindrance of any type of facial paralysis. Once again, additional research is necessary for those who do not have the power to exercise their facial muscles. It is also worthwhile for future studies to evaluate the way affect in the voice is paired with facial expression. While there was not room enough to explore the topic here, vocalizations might be incorporated in treatments plans created by drama therapists in conjunction with music therapists and/or speech pathologists.

Schizophrenic clients, though the focus of this paper, are not the only population that would benefit from such research. Further research is also needed in applying facial expression-oriented therapies to drama therapy techniques. It would be of tremendous worth to employ these tactics with clients in hopes of not only observing the effects, but also improving the approaches.

A Final Word…For Now

"Many consider art to be a celebration of human individuality and to that extent it may seem like a travesty to even search for universals" (Ramachandran & Hirstein, 1999, p. 16). Within the field of drama therapy, this can hold true, as at times a question arises as to whether the scientific portion matters. It is the uniqueness of the practice that draws people to it; so many creative minds have been chastised for marching to the beat of a different drum, it makes sense that there are many who would be wary of getting forced back in to a rigid, medical model structure.

As drama therapists fight to maintain the integrity of the field, finding the scientific benefits of our modality experienced by schizophrenic clients offers a path towards advocacy for what we do married to a progression towards what we might have. This driving force makes additional research into the nature of schizophrenic healing and creative use of facial expressions exciting. Just as there are artists who create because they must, there are scientists who research because they must. And there is no reason to believe these two beings cannot coexist within the same body. There are times when we drama therapists, as inquisitive animals, simply *want to know*, much to the benefit of many.

The study of the human face fascinates me, in part because I simply want to know. It appeals to my desire to be understood, and my wish to sate that desire in schizophrenic clients. The history of the subject maintains a further hold on me—it seems possible to trace a global

narrative on the creases of a forehead. I am motivated by my longing to anticipate the needs of others, to keep friends and family laughing, to gain a glimpse into the soul, and by any other superpower that might be linked to the expression of emotion. And yes, I wish to prove there is value in a methodology I know to be effective.

Drama therapists often witness important successes in schizophrenics' responses to their treatments. Many a clinician has stumbled upon the rich inner world of these individuals after other members of treatment teams have given in to the idea that rigid expressions suggest no inner world exists. But facial expressions can be taught. New insights into communication styles are available. And the adaptation of a profession that finds its success in the use of non-traditional means can provide insight into corporeal techniques tethered to emotional growth. Emotional contagion and the facial feedback hypothesis, which suggest such inescapable links between the manifestation of facial expressions and their somatic accompaniments, offer explanations for drama therapy's impact and indicate that it is, in fact, possible to smile and fool your body.

REFERENCES

Abumrad, J. & Krulwich, R. (2008, February 15). Deception. [Radio broadcast]. In *Radio Lab* New York: WNYC

Abumrad, J. & Krulwich, R. (2008, February 22). Laughter. [Radio broadcast]. In *Radio Lab* New York: WNYC.

Bartlett, M. S., Hager, J. C., Ekman, P., & Sejnowski, T. J. (1999). Measuring facial expressions by computer image analysis. *Psychophysiology, 36*(2), 253-263.

Baum, S. (Creator/Producer). (2009). *Lie to Me*. [Television Series]. New York: Fox Broadcasting Company.

Bell, C. (1824). *Essays on the Anatomy and Philosophy of Expression*. (2nd Ed.) London: John Murray, Albermarle Street.

Bell, C. (1877). *The Anatomy and Philosophy of Expression as Connected with the Fine Arts*. (3rd Ed.) London: Longman, Hurst, Rees, and Orme.

Bergman, J. (2000). Creating new cultures: Using drama therapy to build therapeutic communities in prisons. In P. Lewis, & D. R. Johnson (Eds.), *Current approaches in drama therapy.* (pp. 303-330). Springfield, IL, US: Charles C. Thomas Publisher.

Boal, A. (1979). *Theatre of the Oppressed*. New York, New York: Theatre Communications Group.

Boal, A. (1995). In Jackson A. (Ed.), *The Rainbow of Desire: The Boal Method of Theatre and Therapy*. New York, NY: Routledge.

Breitenbach, N. (1984). Identity development during creative make-up sessions. *The Arts in Psychotherapy, 11*(2), 101-107.

Breitenbach, N. (1987). Triangular mirror relationships in the creative make-up session. *The Arts*

in Psychotherapy, 14(4), 313-319.

Butler, J. (2009). *DvT and Schizophrenia*. Institute for the Arts in Psychotherapy, New York, NY.

Butler, J. & Gatta, T. (2009, March). *DvT and Schizophrenia*. Presented at National Association for Drama Therapy Eastern Region Conference, New York, NY.

Choulant, L., Frank, M., Garrison, F., Streeter, E. (1920). *History and Bibliography of Anatomic Illustration in its Relation to Anatomic Science and the Graphic Arts*. Chicago, IL: Chicago University Press.

Cuthbertson, R. (1990). The highly original Dr. Duchenne. In *The mechanism of human facial expression* (pp. 225-241). (R. A. Cuthbertson, Trans.) Cambridge, England: Cambridge University Press (Original work published 1862).

Damasio, A. (1994). *Descartes' error : Emotion, reason, and the human brain*. New York: New York : G.P. Putnam.

Diagnostic and statistical manual of mental disorders : DSM-IV-TR (2000). In American Psychiatric Association, American Psychiatric Association. Task Force on DSM-IV (Eds.). Washington, DC: Washington, DC : American Psychiatric Association.

Darwin, C. (1909). *Origin of species*. New York: Random House. (Original work published 1859).

Darwin, C. (1998). *The Expression of the Emotions in Man and Animals* (3rd ed.). (P. Ekman, Ed.) New York, NY, US: Oxford University Press. (Original work published 1872).

Deleuze, G. (1987). In Guattari F. (Ed.), *A thousand plateaus : Capitalism and schizophrenia*. London : Athlone Press.

Duchenne, G.B., (1990). In Cuthbertson R. A. (Ed.). *The mechanism of human facial expression*.

New York: Cambridge University Press. (Original work published 1862).

Earnst, K. S., Kring, A. M., Kadar, M. A., Salem, J. E., Shepard, D. A., & Loosen, P. T. (1996). Facial expression in schizophrenia. *Biological Psychiatry, 40*(6), 556-558.

Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology, 17*(2), 124-129.

Ekman, P. (1973). *Darwin and facial expression: A century of research in review*. Oxford, England: Academic Press.

Ekman, P., & Friesen, W.V. (1975). *Unmasking the Face: A guide to recognizing emotions from facial clues.* Oxford, England: Prentice-Hall.

Ekman, P., & Oster, H. (1979). Facial expressions of emotion. *Annual Review of Psychology, 30*, 527-554.

Ekman, P. (Ed.). *Emotion in the Human Face* (1982). New York : Cambridge University Press.

Ekman, P., Levenson, R. W., & Friesen, W. V. (1983). Autonomic nervous system activity distinguishes among emotions. *Science, 221*(4616), 1208-1210.

Ekman, P. (1992). Facial expressions of emotion: New findings, new questions. *Psychological Science, 3*(1), 34-38.

Ekman, P. (1993). Facial expression and emotion. *American Psychologist, 48*(4), 384-392.

Ekman, P., & Davidson, R. J. (1993). Voluntary smiling changes regional brain activity. *Psychological Science, 4*(5), 342-345.

Ekman, P. (1997). Expression or communication about emotion. In N. L. Segal, G. E. Weisfeld & C. C. Weisfeld (Eds.), *Uniting psychology and biology: Integrative perspectives on human development.* (pp. 315-338). Washington, DC, US: American Psychological Association.

Ekman, P., Campos, J., Davidson, R., & de Waal, M. (Eds.) (2003). *Emotions Inside Out: 130 Years after Darwin's: The Expression of the Emotions in Man and Animals*. Annals of the New York of Sciences: Vol. 1000.

Ekman, P. & Rosenberg, E. L. (Eds.) (2005). *What the face reveals: Basic and applied studies of spontaneous expression using the facial action coding system (FACS), second edition*. New York, NY, US: Oxford University Press.

Enticott, P. G., Johnston, P. J., Herring, S. E., Fitzgerald, P. B., & Hoy, K. E. (2008). Mirror neuron activation is associated with facial emotion processing. *Neuropsychologia, 46*(11), 2851-2854.

Erskine, J., George, S., Gilooly, S., & Stewart, D. (Producers). (2001, March 7). *The Human Face* [Television program]. London, UK: BBC 1

Falkenberg, I., Bartels, M., & Wild, B. (2008). Keep smiling!: Facial reactions to emotional stimuli and their relationship to emotional contagion in patients with schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience, 258*(4), 245-253.

Falkenberg, I., Klügel, K., Bartels, M., & Wild, B. (2007). Sense of humor in patients with schizophrenia. *Schizophrenia Research, 95*(1-3), 259-261.

Gadrland Thomson, R. (2009). *Staring : How we look*. Oxford ; New York: Oxford ; New York : Oxford University Press.

Hager. (2003). *Introduction To The Dataface Site: Facial Expressions, Emotion Expressions, Nonverbal Communication, Physiognomy*. Retrieved June 12, 2009 from Dataface. Website: http://face-and-emotion.com/dataface/general/homepage.jsp.

Hatfield, E., Cacioppo, J.L., & Rapson, R.L. (1993). Emotional Contagion. *Current Directions in Psychological Sciences*, 2, 96-99.

Johnson, D. R. (1984). Representation of the internal world in catatonic schizophrenia. *Psychiatry: Journal for the Study of Interpersonal Processes, 47*(4), 299-314.

Johnson, D. R., Forrester, A., Dintino, C., James, M., & Schnee, G. (1996). Towards a poor drama therapy. *The Arts in Psychotherapy, 23*(4), 293-306.

Johnson, D.R. & Lewis, P. (2000). *Current Approaches in Drama Therapy*. Springfield, IL: Charles C. Thomas.

Johnson, D.R. (2005). *Developmental transformations: Text for practitioners*. Institute for the Arts in Psychotherapy: New York, NY.

Johnson, D.R. (2009). Commentary: Examining underlying paradigms in the creative arts therapies of trauma. *The Arts in Psychotherapy, 36(2)*, 114-120.

Jones, P. (2008). *Drama as Therapy: Theory, Practice, and Research*. London, England: Routledge.

Jones, P. (2008). The active self: Drama therapy and philosophy. *The Arts in Psychotherapy, 35*(3), 224-231.

Keltner, D., Kring, A. M., & Bonanno, G. A. (1999). Fleeting signs of the course of life: Facial expression and personal adjustment. *Current Directions in Psychological Science, 8*(1), 18-22.

Kring, A. M., Kerr, S. L., Smith, D. A., & Neale, J. M. (1993). Flat affect in schizophrenia does not reflect diminished subjective experience of emotion. *Journal of Abnormal Psychology, 102*(4), 507-517.

Kundert-Gibbs, J. (2009). *Action! Acting Lessons for CG Animators*. Indianapolis, Indiana: Wiley Publishing, Inc.

Landy, R. J. (1993). *Persona and performance: The meaning of role in drama, therapy, and*

everyday life. New York, NY, US: Guilford Press.

Landy, R. J. (1994). *Drama therapy: Concepts, theories and practices (2nd ed.)*. Springfield, IL, England: Charles C Thomas, Publisher.

Landy, R. J. (2006). The future of drama therapy. *The Arts in Psychotherapy, 33*(2), 135-142.

Landy, R. J. (2008). *The couch and the stage: Integrating words and action in psychotherapy*. Lanham, MD: Jason Aronson.

Le Brun, C. (1984). *Méthode pour apprendre à dessiner les passions*. (G. Olms, Ed.). Amsterdam: Plaats. (Original work published 1698).

LeDoux, J. (1996). *The Emotional Brain: The mysterious underpinnings of emotional life*. New York: Simon & Schuster.

Lee, T., Josephs, O., Dolan, R. J., & Critchley, H. D. (2006). Imitating expressions: Emotion-specific neural substrates in facial mimicry. *Social Cognitive and Affective Neuroscience, 1*(2), 122-135.

Levenson, R. W., Carstensen, L. L., Friesen, W. V., & Ekman, P. (1991). Emotion, physiology, and expression in old age. *Psychology and Aging, 6*(1), 28-35.

Liberatore, V. (2001). Performing the passions between classical and modern epistemes: Text and photography in Duchenne de Boulogne's "mecanisme de la physionomie humaine". Thesis (Ph.D.)--New York University, 2001).

MacKay, B. (1987). Uncovering buried roles through face painting and storytelling. *The Arts in Psychotherapy, 14*(3), 201-208.

Montague, J. (1994). *The Expression of the Passions: the Origin and the Influence of Charles Le Brun*. New Haven, CT: Yale University Press.

Moreno, J. L. (. (1987). In Fox J. (Ed.), *The Essential Moreno: Writings on Psychodrama, Group*

Method, and Spontaneity. New York, NY: Springer Publishing Co.

Park, S., Matthews, N., & Gibson, C. (2008). Imitation, simulation, and schizophrenia. *Schizophrenia Bulletin, 34*(4), 698-707.

Patterson, T. L., & Leeuwenkamp, O. R. (2008). Adjunctive psychosocial therapies for the treatment of schizophrenia. *Schizophrenia Research, 100*(1-3), 108-119.

Penn, D. L., & Combs, D. (2000). Modification of affect perception deficits in schizophrenia. *Schizophrenia Research, 46*(2-3), 217-229.

Phillips, M. L., Williams, L., Senior, C., Bullmore, E. T., Brammer, M. J., Andrew, C., et al. (1999). A differential neural response to threatening and non-threatening negative facial expressions in paranoid and non-paranoid schizophrenics. *Psychiatry Research: Neuroimaging, 92*(1), 11-31.

The Psychology of Facial Expression. (1997). In Russell J. A., Fernández Dols J. M. (Eds.). New York: Cambridge University Press.

Rachman, S. (1997). The evolution of cognitive behaviour therapy. In D. M. Clark, & C. G. Fairburn (Eds.), *Science and practice of cognitive behaviour therapy.* (pp. 3-26). New York, NY, US: Oxford University Press.

Ramachandran, V. & Hirstein, W. (1999). The science of art: a neurological theory on the aesthetic experience. *Journal of Consciousness Studies*, 6(6-7), 15-51).

Salas, J. (2000). Playback theatre: A frame for healing. In P. Lewis, & D. R. Johnson (Eds.), *Current approaches in drama therapy.* (pp. 288-302). Springfield, IL, US: Charles C. Thomas Publisher.

Schechner, R. (2001). Rasaesthetics. *The Drama Review*, 45(3), 27-49.

Schnee, G. (1996). Drama therapy in the treatment of the homeless mentally ill: Treating

interpersonal disengagement. *The Arts in Psychotherapy, 23*(1), 53-60.

Schwartz, B. L., Mastropaolo, J., Rosse, R. B., Mathis, G., & Deutsch, S. I. (2006). Imitation of facial expressions in schizophrenia. *Psychiatry Research, 145*(2-3), 87-94.

Shakespeare, W. (1907). *Henry VIII* (S. Lee, Ed.). London: Cambridge Renaissance Press. (Original work published 1623)

Shaw, R.J., Dong, M., Lim, K.O., Faustman, W.O., Pouget, E.R. & Alpert, M. (1999). The relationship between affect expression and affect recognition in schizophrenia. *Schizophrenia Research,* 37, 245-250.

Sternberg, P., & Garcia, A. (2000). Sociodrama. In P. Lewis, & D. R. Johnson (Eds.), *Current approaches in drama therapy.* (pp. 196-217). Springfield, IL, US: Charles C. Thomas Publisher.

Surveillance Technology: If Looks Could Kill. (October 23, 2008). *The Economist.*