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Motion Elicits Emotion

by

Emma Denson

INTRODUCTION

Bodies serve as one of the many vehicles through which humans can understand one another. They can provide insight into characteristics such as age, race, and health. Often our bodies, regardless of how much we want to conceal it, can reveal our emotions. Though the age-old adage is “wearing your heart on your sleeve”, emotions often come through body language and facial expressions. Jessica Young, in her article “The therapeutic relationship in dance/movement therapy: A phenomenological study” states that “The phenomenological paradigm of the lived body views the body as the primary means of engaging, understanding, and making meaning of the world and our place within it (Shaw 2004)” (Young 97). In fact, bodies reveal so much about humanity that philosophers, psychologists, and scholars across multiple disciplines have attempted to determine whether the emotions and thoughts of a person and the body are unified, or are in fact separate entities that only appear to be unified through expression.

Another field that has explored this topic thoroughly over the years is theatre. The body is arguably the actor’s most powerful tool in performance. The body hosts the mind and the voice, and serves as a catalyst for both while still telling so much of what’s going inside a person through non-verbal cues. Thus, a proper understanding of the relationship between the body and emotion is not merely useful to the theatre scholar or practitioner, but a vital necessity. As opposed to literature, which presents the audience with a body of text, drama presents the audience with text in the form of a body. The words of the script are empty until an actor breathes life into them and takes on the actions of talking, moving, and engaging with the text. It is only then that the actor and audience are in sync and theatre happens. This is because theatre,

with the exception for the few “closet dramas”, is meant to be performed and ultimately performed for an audience. Colette Conroy, in her book *Theatre and the Body*, discusses this in further detail:

“...in theatre mimesis is a form of corporeal analysis. It uses the body to represent on stage and in fiction what happens in reality according to a form of analysis and simplification. The performance is then presented on stage as a text-as a body of material that is there to be analyzed” (*Theatre and the Body*, 36).

Regarding this topic, there is a pattern of things that have a common thread. Theatrical pioneers such as Chekhov, Laban, Suzuki, and Bogart all coined their own versions of a series of movements that was intended to assist the actor in accessing emotion. Mala Powers, in her preface written for Michael Chekhov’s *On the Technique of Acting*, elaborates on Chekhov’s interpretation of this concept:

“Feelings cannot be commanded, they can only be coaxed. The means for coaxing up Feelings are Qualities and Sensations. Qualities are immediately accessible to you- especially to your movements. You can immediately move your arms and hands with the *Quality* of tenderness, joy, anger, suspicion, sadness, impatience, etc., even though you do not experience the Feeling of tenderness, joy, or anger. After moving with one of these qualities, sooner or later you will observe that you are experiencing the *Sensation* of tenderness, and very soon this Sensation will call up a true emotion or *Feeling* of tenderness within you” (*On the Technique of Acting*, preface xl-xli).

Powers' statement about Chekhov's method adds a powerful voice to the conversation that this paper initiates. Her claim suggests that certain qualities of movement evoke emotions that are not as easily accessible through other methods.

The study of these methodologies is what sparked my yearning to further explore a concept that seemed to appear in my studies time and again: that motion serves not only as a channel through which emotion is externalized, but can also serve as the primary initiating force that penetrates the existing well of emotion within us. Theatre scholar Rhonda Blair refers to neuroscientist Antonio Damasio's research regarding action and the tie to emotion. She writes, "Further, there is measurable neurological evidence that emotion and feeling can follow 'doing' . As Damasio says, 'In the beginning was emotion, but at the beginning of emotion was action'" (Blair, 14). Too often, the mind and body are treated as separate entities with separate performance functions for the actor, and emotion is contributed to being purely intellectual in its origins, whereas the body is merely a physical reflection of said emotion. My counterargument to that is "thinking is unquestionably a bodily experience; it is simply a different form of action" (Conroy, 23). In essence, all roads lead to emotion being drawn forth from action, because even thinking is an action, and furthermore, as Damasio asserts, "reason in the fullest sense grows out of and is permeated by emotion, that emotion is consistently affected by reason and conscious cognition, and that *it all is a manifestation of the body* (of which the brain is an organ)" (Blair 12, emphasis added). If this is true, it could be argued that other parts of the body could also bring forth emotion. This sparked a question, which would serve as the grounding point for this research project: Does motion elicit emotion, and if so, are there specific movements that evoke universal emotions?

The aim of this paper is to answer that very question through defining emotion, exploring the history of the relationship between motion and emotion, examining theatrical methods both pre- and post-Freudian, and finally culminating in a series of experiments I conducted that tackle this topic in a practical manner.

CHAPTER ONE: TYPES OF EMOTION

In order to properly research emotions and their connection to motion, I had to first set my boundaries as to which emotions I would study. There has been much debate as to what emotion is, how many emotions exist, and how those emotions coincide with each other. Kendra Cherry discusses some of the arguments in her article, “Six Basic Types of Emotions”. She writes “some researchers have suggested that there are only two or three basic emotions. Others have suggested that emotions exist in something of a hierarchy” (Cherry, 5). Other theorists believe “there are at least 27 distinct emotions, all of which are highly interconnected. After analyzing the responses of more than 800 men to more than 2,000 video clips, researchers created an interactive map to demonstrate how these emotions are related to one another” (Cherry, 5). For the purposes of this paper, I will be following an adaptation of Robert Plutchik’s emotional wheel theory, in which,

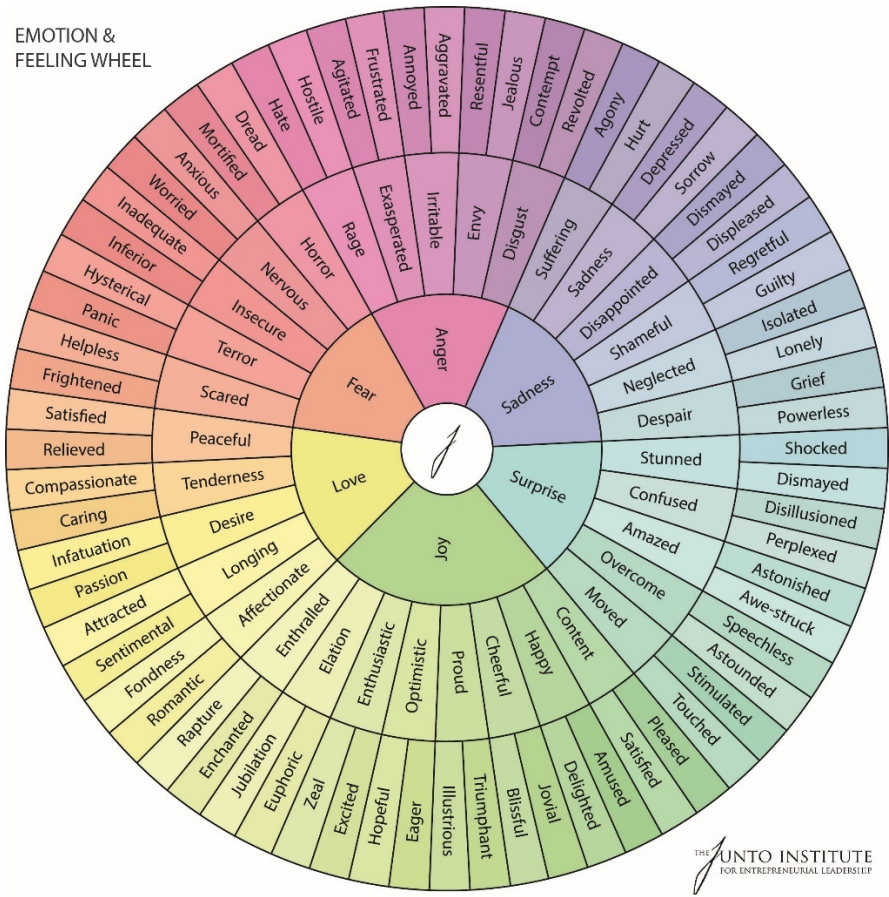
“Psychologist Robert Plutchik put forth a "wheel of emotions" that worked something like the color wheel. Emotions can be combined to form different feelings, much like colors can be mixed to create other shades. According to this theory, the more basic emotions act something like building blocks. More complex, sometimes mixed emotions, are blendings of these more basic ones. For example, basic emotions such as joy and trust can be combined to create love” (Cherry, 1).

The illustration of the wheel proved to be the ideal model for this research study because of the physical nature of the experiments. Prior to locking down specific movements, I experimented with different gestures on my own. I quickly realized that subtle changes in the hands, breath, or rate at which the gesture was completed altered the emotion that came forth from the gesture. My goal then became to find movements for each of these six primary emotions, and from there find the changes that would elicit the secondary and tertiary emotions.

Others have taken Plutchik's theory and made alterations to it, some of these adaptations serve as the foundation on which my research is conducted. Jeremy Whelan, creator of the New School Acting System and Mosaic Acting System, states, "Emotions are to actors what colors are to painters" (Mosaic Acting System 18). It is through this palette of emotions that actors can communicate some of the most human and complex emotions. Scholar Tom Drummond specializes in emotional vocabulary, and he identifies the primary emotions as being love, joy, surprise, anger, sadness, and fear. The secondary and tertiary emotions, such as lust, envy, or contentment, all derive from these initial six emotions.

Below is an image of this "wheel of emotion":

EMOTION & FEELING WHEEL



As stated earlier, there is much debate in the scientific community as to how many emotions there are, and it is an argument that is constantly in flux. However, most of the studies utilized in this paper acknowledge some if not all of these six emotions as the primary emotions, even the studies conducted on a global scale. There is room for further research in this study regarding other emotions, but this paper will focus on these six emotions.

CHAPTER TWO: BIOLOGICAL ASPECTS OF EMOTION

Once we have determined which emotions we want to study, the next step is to determine the relationship between these emotions and movements. There are two questions that have caused much debate in the field of psychology. One, are these responses biologically innate or are they learned, and two, does emotion create a biological response or is the reverse true? This chapter attempts to work through both conversations.

In an article regarding Differential Emotion Theory (DET), American psychologist Carroll E. Izard maintains that “a discrete emotion or pattern of interacting emotions are always present (though not necessarily labeled or articulated) in the conscious brain (Izard 1977, ch. 6;

Izard 2007 a,b). Barrett (2006)” and that “discrete emotion feelings cannot be created, taught, or learned via cognitive processes” (Izard). His argument that emotions are within us at all times and are merely accessed through certain stimuli supports the idea that emotions are hardwired into our biology. He further explains this:

“Whatever else it may be, emotion feeling is at bottom sensation. Thus emotion feelings, like other sensations, are by definition processes that are felt or at least accessible (in the broad sense of that term) in some level of consciousness” (Izard).

According to Izard, emotions are predetermined in us, just like other sensations of the body. This concept has been seen in abstract theatre practice, as we have already seen with Chekhov’s Qualities and Sensations. We also see it with notable acting instructors such as Kristin Linklater. Linklater is primarily known for vocal acting, especially with the utilization of the breath. In one of her exercises, she says, “[i]magine, if you can, that your voice, your brain, your emotions, your health and your senses are all in the center of your body, somewhere below your diaphragm” (Linklater). Linklater’s exercise then guides her students through a series of breathing (which is a form of movement I will touch on later in this thesis) that accesses these innate emotions. During this, she adds pieces of dialogue for the students to recite. Her intention is to see how the breath affects the emotion of the words. One of her students, Sheila Bandyopadhyay, an actor, had this to say.

"The chart taps into something before or beyond the text; something *more primal and raw*, which informed my playing of the words in a new and unexpected ways. I felt it instantly unlocked something” (Linklater, emphasis added).

While this is more of a practical side of the argument, it is worth acknowledging the terms used, particularly “primal” and “raw”. Both of these adjectives allude to our basest forms; it points to the very core of what makes us human.

In “Nonverbal communication speaks volumes”, an episode of the podcast *Speaking of Psychology*, Audrey Hamilton interviews David Matsumoto, PhD, a “renowned expert in the field of facial expression, gesture, nonverbal behavior, emotion, and culture”. During the interview, Matsumoto explains that when trying to determine whether something like facial expressions are learned or biologically innate, one of the best subjects to study are “congenitally blind individuals [because there is] no way that they could possibly learn to see those expressions and put them on their faces from birth because they’ve been blind from birth”. He goes on to explain “in the same emotionally evocative situations that blind individuals produce on their faces exactly the same facial muscle configurations where the same emotions as sighted individuals do”. This example could be applied to the universality of motion because facial expressions are, though not as broad and noticeable from a distance, still a form of motion. Matsumoto concluded “facial expressions of emotion is something that is biologically innate and that we are all born with.” This finding proved to be true for others who were not immersed in an environment where they could absorb and practice learned behaviors.

Matsumoto’s findings would be more sufficient if this study was meant to only be used in the United States. Since I am looking for applications on a global theatrical scale, they serve more as a smaller piece to the puzzle. With this in mind, the next natural step is to examine people groups in different parts of the world who might have limited or no access to media, which exempts the possibility that facial expressions and movements are inherited cross-

culturally and are instead inherent from the start. One such study was conducted by Paul Ekman and Wallace V. Friesen titled “Constants Across Cultures in the face of Emotion”. In order to determine the universality of facial expressions, Ekman and Friesen studied a preliterate culture group in New Guinea. They presented the participants with photographs depicting different emotions and asked the participants to assign an emotion word to each of the photographs.

Despite their lack of exposure to other cultures, the majority of the results were positive, with the only exception being the distinction between fear from surprise. However, the authors argued this might be due to the fact that “in this culture fearful events are almost always also surprising” and reminds readers that their results still conclude that while “cultures may not make *all* the same distinctions among emotions, [it] does not detract from the main finding that most of the distinctions were made across cultures” (Ekman and Friesen, 128-129). The results of this study suggest possible evolutionary or biological components to emotions that exist in humans that surpass, but do not eliminate the significance of, cultural differences.

The evidence I have provided thus far has been primarily focused on facial expressions, but there is also research that examines emotions on a larger and broader scale: expressions and gestures of the human body. Another study that focuses on subjects from a remote culture is “Emotions Are Understood From Biological Motion Across Remote Cultures”. The authors write that “[t]he existence of a set of seemingly *innately predisposed* and *universally recognizable emotional facial expressions* has been attributed primarily to two adaptive benefits: sensorimotor regulation (Chapman, Kim, Susskind, & Anderson, 2009; Darwin, 1872; Frab, Chapman, & Anderson, 2013; Susskind et al..2008) and social communication (Dawin, 1872; Fridlund, 1994)” (460, emphasis added). With this in mind, they theorized “the rationale underlying

theories regarding the purpose of cross-culturally recognizable emotional facial expressions logically extends to emotional signals conveyed through bodily movement” (460). This is incredibly beneficial for theatre, because “these cues may be discerned from longer distances, when facial features may be difficult or impossible to distinguish” (460). Staged productions certainly need expressive facial movements, but they rely much more heavily on the gestures and positions of the body.

The authors of this paper set out to prove their theory by engaging with the Kreung people, an isolated tribe with no access to Western media and influence. When they studied motions associated with their emotions and compared them to an American and an Englishman, there were a number of similarities between the three of them. The researchers concluded “that signals of emotions have high cross-cultural ineligibility because they are shaped and constrained by factors universal to all humans, including basic human needs, social intelligence, and physiology” (475). It was the results of these comparisons that enhanced the series of motions utilized to access emotion in actors. The parts of the body that were engaged with all three, as well as the similarities between posture and breath, all lend to a universal bodily movement that will not only aid actors in accessing these emotions, but creating a powerful image on stage that resonates with audiences world-wide.

Moving forward with the assumption that emotions are in fact biologically innate, the next question to consider is which came first: the emotion or the motion? A research study conducted for an article entitled “Listening to Your Heart: How Interoception Shapes Emotion Experience and Intuitive Decision Making” provided a key term to my own research: interoception. This refers to “how well individuals can perceive subtle bodily changes” (1835).

The article draws from two highly critiqued studies, ones which I will discuss in further detail in later chapters. They are the Jamesian theory, which was “modified to argue that emotion experience is a product of the cognitive appraisal of bodily arousal” and the “somatic marker hypothesis (SMH; Damasio, 1994)” which “Proposes that emotional biasing signals emerging from the body influence decision making” (1835). The researchers of this article expand on these two theories and relate them to affective decision making in humans.

In their experimentation, they found that the outcome was greatly affected by something called “[a]nticipatory bodily changes (somatic markers) [which are] associated with decision making on the IRT” which stands for intuitive reasoning task, “[and] were measured by recording HR” (heart rate) “and electrodermal activity (EDA; in microsiemens) prior to each decision trial” (1840). These anticipatory bodily changes demonstrate the importance of non-verbal communication not only with the other but with the self, both of which are integral in acting theory and application.

One such example of an application is between two scene partners. Though movements can be anticipated through knowing one’s blocking, there is an organic richness to storytelling that is built off of ensemble work between actors. A great deal of that comes from the actors having the ability to pick up on a partner’s body cues without needing any sort of verbal cue. An example of this kind of synchronization is found in an article about the relationship between mirror neurons and karate. The study was conducted to see if opponents could pick up on bodily signals from their opponents and “empathize with the enemy”, thus being able to predict their movements. They found “mirror neurons show activity not only when a person moves, but also when a person observes someone else making that movement” and realized that “this may be the

result of a sort of automatic empathy of ‘really feeling what another is feeling’ (Carey 2006)” (Conteiro et al). Just as the body can serve as a great communicator within the field of theatre, the same can be said of sports such as karate.

Damasio and his colleagues’ “findings demonstrate that emotion experience and intuition are associated with individual differences in the ability both to generate and to perceive accurately subtle changes in the body, consistent with the thesis that how one thinks and feels sometimes genuinely involves following one’s heart” (1843). The authors here seem to fall on a cliché. However, culturally, we are prone to use similar verbiage to describe our emotions, such as having a “gut feeling” or “my heart sank”. Arguably, they are clichés for a reason: they are universally experienced.

CHAPTER THREE: THE JAMES-LANGE THEORY

The most typical model, often referred to as the “common sense model” for emotional response to stimuli argues that a stimulus triggers an emotion, and that emotion triggers a bodily

response. There are a few theorists, however, who argue in favor of a theory that states the stimuli triggers a bodily response which in turn brings forth an emotion. This paper will focus on somatic feedback theories, which suggest that “once the bodily response has been generated (that is, a change in heart rate, blood pressure, facial expression, and so forth), the mind registers these bodily activities, and this mental state (the one caused by the bodily changes) is the emotion” (18). This is a concept that has been around since the end of the 19th century and has sparked discussion in the field of psychology ever since.

The two men who are most famously associated with this theory are “American psychologist William James (1884) and Danish physiologist Carl Lange (1887)” who “independently proposed the oldest theories of emotion at approximately the same time” (Psychology Notes HQ). Their findings were later combined into what is now known as “the James-Lange Theory”. Their theory states:

“ “[T]he nervous system of every living thing is but a bundle of *predispositions* to react in particular ways upon the contact of particular features of the environment... The neural machinery is but a hyphen between determinate arrangements of matter *outside* the body and determinate impulses to inhibition or discharge *within* its organs’ (1884, p. 190, emphasis added)” (Theories of Emotion, 18).

Here we see a theorist arguing in favor of an innate set of physical responses that generate emotional responses. The article explores this further, however, by making the claim that “the bodily responses are unique for each emotion and that it is in virtue of the unique patterns of somatic activity that the emotions are differentiated”. What this means is that for each emotion there is a different bodily change, one “for sadness, one set for anger, one for happiness, and so

on” (Theories of Emotion). This statement furthered my curiosity and fueled my search for the right movements to elicit each emotion.

However, the James-Lange theory has not been without its share of criticism over the past several decades. The James-Lange theory leaves room for a different bodily change assigned to each emotion, but the study itself does little in the way of proving it to be true, which was one of physiologist Walter Cannon’s major critiques of the theory. Some argue that a physiological response to a stimuli is not strong enough to initiate an emotional response. With that being said, as time has progressed and technology has advanced, the scientific and psychological communities are finding more relevancy in the James-Lange theory.

One such study was the facial feedback hypothesis conducted by Ekman et al. in 1983 as the search for “emotion-specific ANS” (autonomic nervous systems) “patterns” continued:

“In this study, actors posed facial expressions (without direct knowledge of the intended emotion) while an array of autonomic variables were recorded. Consistent with ANS specificity and James’s theory, results suggested autonomic differentiation of the basic emotions of anger, fear, happiness, disgust, sadness, and surprise.”

(Friesen 388).

Studies like this one are achieved via methods which James did not have access to in his time. The advancement of technology has allowed scientists to test theories, and the results are encouraging. The 1983 study inferred “that afferent feedback from facial muscles played a causal role in generating the distinct ANS patterns which implied that peripheral input can evoke emotion linked autonomic activity, independent of cognitive appraisal” (Friesen 388). This particular experiment is notable because of its lack of a situational arousal or stimulation, which

is one of the other critiques of this theory. James himself “recognized the significance of the environmental context in which emotion occurs” (Friesen 388). James and other theorists who support the James-Lange theory are rooted heavily in the evolutionary biological instinct assertion of Darwinism.

This instinct requires a situation in which a person is inclined to rely on survival instincts, such as fight or flight. In James’ infamous bear example, in which a person sees a bear, their body reacts, and then their brain recognizes this reaction as fear, the bear itself is an important component in eliciting the emotion. However, with the facial feedback hypothesis, there is no situation, but instead merely facial movements which were enough to elicit an emotion; change.

This kind of work most fascinates me from a dramatic perspective. Whether a person is acting for the stage or for the camera, more often than not there will not be a literal situation to which an actor can respond. If the James-Lange theory truly relied on situational experiences to bring forth emotions, then the applications for it in the dramatic arts would be limited. However, as seen from the facial feedback hypothesis, the movements themselves often suffice. In fact, there have already been several practical applications of this theory, including “reading affective scenarios (e.g., Witvliet and Vrana, 1995), directed facial expressions (e.g., Ekman et al., 1983), affective imagery and recall (e.g., Fridlund et al., 1984; Rainville et al., 2006), music (e.g., Nyklicek et al., 1997), slides (e.g., Lang et al., 1993), and films (e.g., Gross and Levenson, 1995)” (Friesen 390). These practical applications were successfully utilized by those that applied the James-Lange theory to their practice. As with any renowned theorist, the debate over the effectiveness of the James-Lange theory will likely continue amongst psychologists for years

to come, yet the evidence that “indicates that basic emotions can be reliably distinguished by their autonomic response patterns” (Friesen 390-391) remains intact.

TODAY’S THEORIST: ANTONIO DAMASIO

It is not surprising that people in the arts are drawn to this theory. In fact, one of the psychologists who built on James’ research, initially explored the topic because of his “interest in literature and music”. He said in an interview with Jason Pontin for the MIT technology review, that it was “important to [him] with what [he] thought was going to be important scientifically. In the interview, Damasio explains how he approaches the James Lange theory and delves into it even further. Theatre scholar Rhonda Blair mentions Damasio and his approach to emotion theory in her essay about embodiment in the *Theatre Symposium*. She writes, “there is measurable neurological evidence that emotion and feeling can follow “doing”. As Damasio says, ‘In the beginning was emotion, but *at the beginning of emotion was action*’”(Blair 14, emphasis added). Damasio elaborates on his claim that the bodily action of fear precedes the emotion. He argues that within us all are programmed “body states”, such as hunger that tells us to eat and thirst that signals for us to drink, that are intended to help us survive. Emotions like fear, also fall into this predetermined set of instincts. Damasio says, “Once the action program is deployed and the brain has the possibility of mapping what has happened in the body, then *that* leads to the emergence of the mental state”. Essentially, his body must first signal him physically, just as it does with pangs of hunger, before the mind can fully establish what emotion is being elicited. He explains the science behind it in his book, *Descartes’ Problem*.

“Such features, individually or conjunctively, would be processed and then detected by a component of the brain's limbic system, say, the amygdala; its neuron nuclei possess a dispositional representation which triggers the enactment of a body state characteristic of the emotion fear, and alters cognitive processing in a manner that fits the state of fear.”

(Damasio 131).

Here, Damasio is breaking down James' theory from a biological perspective, detailing the steps that occur in the human body as well as the brain. Damasio's theory, like James', demonstrates again that for them, physical action precedes emotional reaction. There is another facet to this process, however, that takes James' theory a step further.

DAMASIO AND APPLIED THEATRE

In the interview, he goes on to say, “As that is happening to me, I have a mental representation of that body state as much as I have a mental representation of what frightened me”. This statement suggests the importance of not only physical motion eliciting emotion, but also imagined motion eliciting emotion.

“[I]n numerous instances the brain learns to concoct the fainter image of an "emotional" body state, without having to reenact it in the body proper. Moreover, as we have previously discussed, the activation of neurotransmitter nuclei in brain stem and their responses bypass the body, although, in a most curious way, the neurotransmitter nuclei are part and parcel of the brain representation of body regulation. There are thus neural devices that help us feel ‘*as if*’ we were having an emotional state, as if the body were being activated and modified” (Damasio 155, emphasis added).

The phrase “as if” will likely catch the attention of dramatic scholars. That is because the term “the magic if” was coined by Konstantin Stanislavski for his acting method, on which I will elaborate in chapter four. Essentially, Stanislavski focused more on the “possibility of events” rather than trying to force an actor to “honestly believe in the truth and reality of events on stage” (Moore, 25). I would argue that there lies within a combination of these two schools of thought a singular, streamlined truth that will lead to believable and empathetic performance. If an actor is to combine the “magic if” of a scenario they are given, along with the imagined body state that corresponds with the given emotion, it will be a stronger performance than simply utilizing one or the other. This is a prime example of the fields of psychology and theatre blending, and proves that the bridge between the two is shorter than perhaps was imagined.

In addition to its compatibility with existing acting methods, James’ and Damasio’s findings might prove to be safer in application than some methods. In *Descartes’ Problem*, Damasio mentions the Ekman facial expressions experiment I referenced earlier in this chapter. An electrophysiological finding demonstrated that the type of brain waves omitted when the actors smiled because it was one of the facial movements they were instructed to perform differed from those of a genuine smile. It was also noted “subjects were well aware that they were not happy or angry at any particular thing” (Damasio 149).

This is important when applying this approach to theatre. In this way, actors are able to generate a believable and real emotional response that is not as mentally exhausting as an emotion tied to an emotion. For example, the grief felt by an actor who engages this emotion through motion will be less harmful than emotion reached through more mentally invasive practices such as method acting because the brain waves are not the same. Damasio himself

remarks on this very thing. He says, “This may also be the very good reason why great actors, opera singers, and others manage to survive the simulation of exalted emotions they regularly put themselves through, without losing control” (Damasio 149). By utilizing Damasio’s extensions of the James-Lange theory, actors will have believable performances without potentially sacrificing their mental well-being in the process.

Lastly, Damasio’s work once again seems to provide indications of innate emotions within human beings. One of the questions posed to Damasio in the MIT Technology interview remarked on the universality of emotion. Damasio went on to explain a trial they ran at the Brain and Creativity Institute that examined the emotional reaction to music cross-culturally. Instead of finding a significant difference between cultures, as they anticipated, they instead found that “There are lots of subtleties and lots of ways in which certain stimuli elicit different patterns of emotional response with different intensities, but the presence of sadness or joy is there with a uniformity that is strongly and beautifully human”. This finding only reinforces the universality of emotions and the importance of understanding them when creating art intended for global audiences.

CHAPTER FOUR: PHYSICALITY ON THE STAGE

Just as there is much debate in the field of psychology regarding the origins of emotion, the same can be said in the field of theatre. That being said, regardless of one's position on the matter, the importance of the body in communicating and storytelling is agreed upon unanimously. This chapter will explore a few different existing acting methods on which I drew inspiration, and by examining the differences between these methods a through-line connecting them all will be revealed. Through close study of the following methods, I was able to piece together borrowed elements from all of these to create my own approach to acting.

Let us begin with the Stanislavski method. I briefly mentioned him towards the end of chapter three, when I explained the value of his "magic if" in correlation with Damasio's "as if" body states. Stanislavski is notorious for emotional recall, a practice which I do not agree is always the safest or most effective. However, despite his reputation for dwelling on the mind of the actor, there is still a considerable amount of his work that focuses on the body. "Instead of forcing an emotion before going on stage," author Sonia Moore writes of Stanislavski, "the actor fulfills a simple, concrete, purposeful physical action which stirs the psychological side of the psychophysical act" (Moore 19). This is the same method which I am proposing with this paper. The actor should rely on movements as a way to access emotions, as opposed to conjuring up a personal memory associated with the desired emotion. Something even more telling about Stanislavski is the claim that "All elements of the system...now contribute to the truthful execution of a physical action" (Moore 19). Where Stanislavski and I diverge on our approaches

to theatre occurs when the “magic if” shifts to a state of “I am”. This is at the heart of “method acting”, and essentially refers to the idea that when an “actor brings everything he does to the maximum of truthfulness, connects his mind and his body, and feels as if he were doing it in real life,” the actor is then fixed into this “state of ‘I am’ where he merges with his role” (Moore 33). However, it is important to note that “method acting” that we think of today is an Americanization of Stanislavski’s teachings. The fact that Stanislavski’s acting method has morphed into something more rooted in the mind does not degrade the fact that physicality plays a significant role in his teachings.

Michael Chekhov, whom I referred to in the introduction of this thesis, was a student of Stanislavski. However, when he was older Chekhov branched off and created his own method of acting. Mala Powers elaborates on this in her introduction for Chekhov’s book, *On the Technique of Acting*.

“Chekhov declared that the end product of all actor training is the development of the stage character. He observed that the Stanislavsky actor has been taught to build his role on the similarities between his personal history and that of the character in the play...

Eventually, the actor will begin to imitate himself, relying, for the most part, on repeated personal mannerisms and stage cliches” (Chekhov xxvii).

Chekhov’s method attempted to stray from this imitation and rely more on things that began “*outside* the private and internalized world of the performer” (Chekhov xxvii). These took the shape of things such as form, qualities, and one of the elements which inspired me to create my own series of gestures: archetypal gestures. Lenard Petit explains them in his book *The Michael Chekhov Handbook: For the Actor*.

“We work with five gestures as archetypes, and for training purposes these five are rich. Gestures of Pushing, Pulling, Lifting, Throwing, and Tearing are a means of realizing the six statements of action. There are six directions to exercise them in: forward, backward, up, down, left, and right, and there is different information from each of these directions.”

(Petit 10)

While the gestures themselves are beneficial for this study, the latter half of this statement is particularly important to note. It was this idea that, when conducting the research, illuminated the possibilities to emotional changes with simple alterations in direction the movements were performed. For instance, in the experiments that are explained in chapter seven, the participants were encouraged to explore different levels and directions in which to project the energy of their gestures.

Another inspiration for this study is Anne Bogart, and her work on the Viewpoints System. Bogart defines Viewpoints as “a set of names given to certain principles of movement through time and space; these names constitute a language for what happens onstage” (Bogart 8). There are nine Viewpoints in total. Four are Viewpoints of Time: tempo (“the rate of speed at which a movement occurs”), duration (“how long a movement or sequence of movements continues”), kinesthetic response (“a spontaneous reaction to motion which occurs outside you”), and repetition (“the repeating of something onstage”) (Bogart 8-9). The other five are Viewpoints of Space: shape, which is “the contour or outline the body (or bodies) makes in space”, gesture (“a movement involving a part or parts of the body”), architecture “a physical environment in which you are working”, spatial relationship (the distance between things onstage), and topography (“the *landscape*, the *floor pattern*, the *design* we create in movement

through space”) (Bogart 9-11). Of these nine Viewpoints, the ones that were deemed most applicable to this thesis were tempo, repetition, gesture, and topography. It was these that I hypothesized would have the greatest potential in altering the emotions, and for the most part, that hypothesis was proven to be correct.

The reasoning behind it is rather simple. A movement performed quickly would elicit a different emotion than the same movement performed at a slower tempo. Performing a movement over and over again (repetition) could enhance the emotional state that the movement generates. Or, as I would learn after the experiments, prove the opposite to be true in some cases. Gesture is the root of the experiment, so no additional explanation is needed regarding that Viewpoint’s relevance. However, topography is perhaps the most interesting of these four, and resulted in the most innovative explorations in regards to the Viewpoints method. When conducting the experiments, my co-researcher and I found the hands to be a huge component of emotional change in our movements (which refers back to Chekhov, who incidentally wrote “The hands and arms are movable forms, permeated with feelings. As the freest of our organs, they are predestined for creative work, and are capable of expressing outwardly the inner life of man” (Chekhov 53). We found by simply turning the palms upward created a different emotional response than when the palms were turned downward. In the idea of form and gesture, we began to realize that there is a relationship to the topography of the body in relationship to the placement of the hands. For example, if the body is the topography, there is significance in the hands’ pattern of travel being further away or closer to the body (as is documented in a later chapter). Likewise, we found that form difference concerning the hands seemed to impact the results. A movement with the hands that traveled through the air had a different response than

when it had a pattern of travel across a table. Thus, topography need not be limited to travel pattern across the floor, but instead can be compressed to the hand replacing what is normally the body, and instead the body or relative surfaces that engage with the hand become the topography instead of the floor.

These are just a few of the many acting methods that rely heavily on physical movements, but it was these three in particular that served as the basis for my project. Before I could decide which gestures were strongest for certain emotions, I first had to determine which (if any) portions of the body were more strongly engaged for certain emotions than they were for others.

CHAPTER FIVE: THE EMOTIONS SURVEY

One of the first questions that needed to be answered is: do people feel emotions in different parts of the body? At its simplest form, this question merely becomes: from where do emotions come? Generally, the argument has existed along a binary. Either emotions are something in our head, or they are something in our body. Michael Dunn elaborates on this. He says, “On one hand, we are accustomed to thinking of the mind – by which we mean emotion, imagination, reason, and other conscious and unconscious processes of the brain – and the body as distinct and separate” (Dunn, 1). He then goes on to describe how “[o]n the other hand we also associated emotions with different parts of the body” and that ultimately “the truth is generally agreed to lie somewhere in between these two views” and that “there is very little support for the ‘dualist’ school of thought, which holds that the mind is separated from our bodies” (Dunn, 1). This paper will further explore the mind/body connection and further expel ideas that tend to view the two as separate entities.

One of the most obvious results of emotional responses in mind/body connection is physical action. There is of course significant evidence for physical reactions to emotional stimuli, but what if the opposite could be true as well? What if there could be emotional reactions to physical stimuli? If there were some sort of commonalities between regions that were

activated when experiencing a specific emotion, we theorized that actions we created that engaged those regions of the body would elicit the associated emotion. For example, if withdrawing into the fetal position is a response to fear and/or anxiety, we theorized that if an emotionally neutral person were to pull themselves into that position, the movement itself could activate that correlation in the brain and bring forth feelings of fear and/or anxiety in the person performing the movement.

The survey we conducted had limited identifiers, the first of which was Enneagram type. If they did not know their Enneagram type, the respondent was to simply write “N/A”. We then asked what roles they felt they had in life (father, sister, friend, etc.) and to briefly describe themselves (“I am an introverted book lover who enjoys hiking and dogs”). The directions and one of the questions are below:

Directions: Below are a series of questions regarding the placement in the body of emotions.

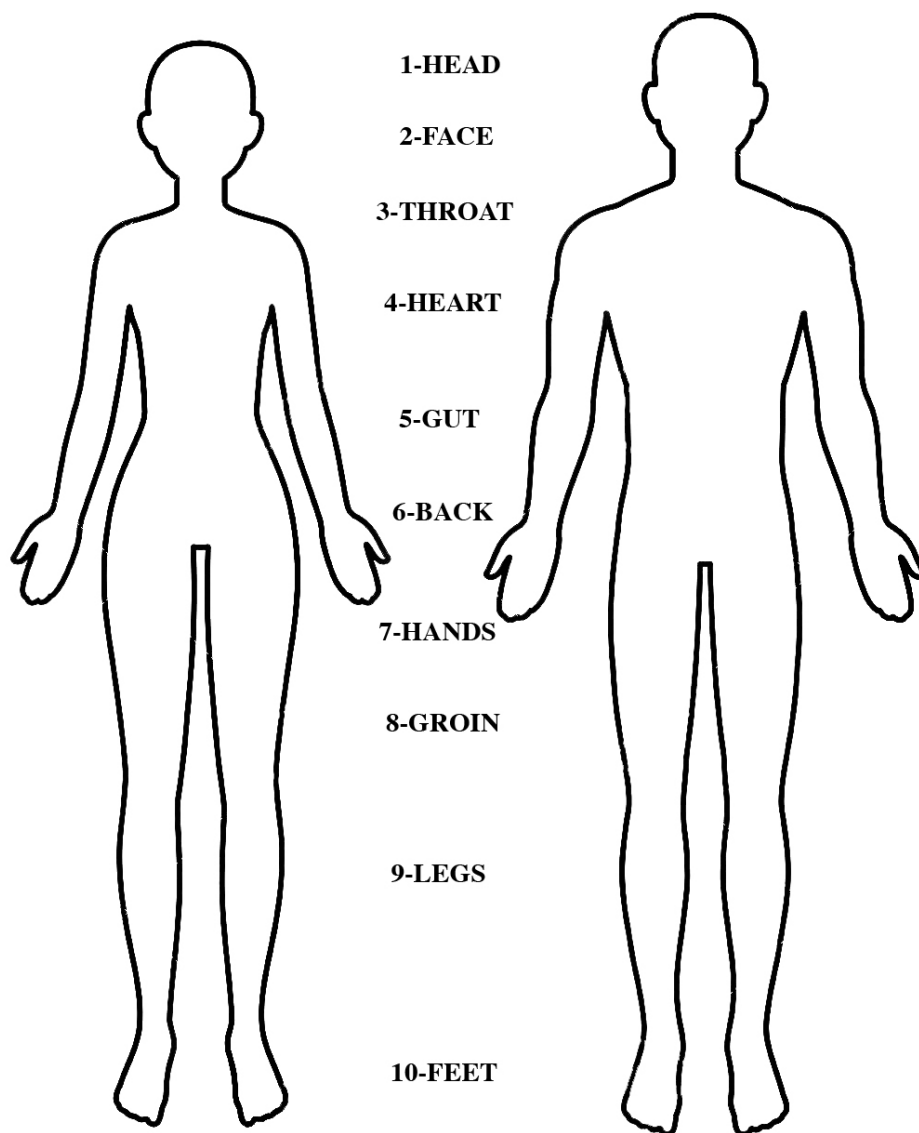
Please read each situation, then refer to the attached diagram. On the diagram, parts of the body are numbered. For each situation, write down where you experience that emotion. For some instances, there may be more than one answer. In this case, please list all the places where you feel it and circle the one where the emotion is felt the most.

1.
 - a. What part of the body feels engaged when you experience love? Please list all that apply.

 - b. What part of the body feels engaged when you experience affection? Please list all that apply.

- c. What part of the body feels engaged when you experience lust? Please list all that apply.

For each of the six emotions, we selected either a secondary and a tertiary emotion that corresponded with it, or we selected two secondary emotions that corresponded with the primary emotion. Our goal was to examine the differences and similarities between regions of the body that were activated even within the subsets of emotions. Here is the diagram of the body mentioned in the directions:



It is important to note that though these were the initial regions of the body in which we had interest, there were several that chose the option of writing in their own regions that were not included in our list. Were we to conduct this survey again, we would add the most common regions that respondents wrote down: arms, neck, shoulders, chest (as something separate from the heart) and eyes (separate from the face).

Since we asked the respondents to put down every region that felt activated with a certain emotion, circling or otherwise noting the region that felt the most engaged, we came up with a points system to most accurately document the results:

- One point was awarded to regions that were part of a group listed under a certain emotion. For instance, if a person wrote down “1”, “2”, and “3” as feeling activated for “happiness”, with no indication that one dominated the others, all three would be awarded one point.
- Two points were awarded to regions that were indicated as dominating the other regions listed. If a person wrote down “6”, “7”, and “9” for nervousness but circled “7”, that number would be awarded two points and the others would be awarded one point.
- Three points would be awarded to regions of the body that were the singular region that felt activated during an emotion. So, if a person answered “3” for sadness, with no other numbers listed, that number would be awarded three points.

The results of the survey were as follows:

Emotion	Location 1	Number	Location 2	Number	Location 3	Number
Love	Heart	26	Head	16	Face/Gut	9
Affection	Heart	21	Head	17	Hands	10
Lust	Head	25	Groin	16	Heart/Gut	9
Longing	Heart	28	Head	18	Gut	11
Joy	Heart	20	Head	18	Face	15
Contentment	Heart	23	Head	21	Gut	14
Pride	Head	33	Face	10	Gut	7
Relief	Head	14	Gut	11	Back	8
Surprise	Head	20	Face	19	Heart	9
Amazement	Head	31	Face	18	Heart	10
Astonishment	Head	26	Face	14	Heart	12
Anger	Head	26	Face/Hands	12	Throat	10
Irritation	Head	24	Face	15	Hands	8
Disgust	Head	22	Face	21	Gut	13
Envy	Head	34	Heart	11	Throat	5
Sadness	Head	22	Face	17	Heart	16

Emotion	Location 1	Number	Location 2	Number	Location 3	Number
Disappointment	Head	18	Face/Heart	15	Throat	8
Shame	Head	18	Heart/Gut	15	Face	12
Fear	Heart	20	Gut	15	Head	13
Horror	Heart	20	Head	15	Gut/Legs	12
Nervousness	Hands	17	Head	16	Gut	15

Once this data had been gathered, we had a better understanding of how to compose the gestures that would be utilized in the experiments.

CHAPTER SIX: THE POSITIONS

As aforementioned, there are multiple pre-existing series of movements related to acting, “Stanislavsky’s methods of physical action and of active analysis, Meyerhold’s biomechanics, Michael Chekhov’s psychological gesture, Strasberg’s sense memory exercises, and Tadashi Suzuki’s intense psychophysical training, among others” (Blair, 14). My aim was not to reinvent the wheel, but instead to combine what I found to be the most efficient motions of my predecessors, cultural prayer positions, and other movements to create a set that best worked for my exercises. After conducting the emotions survey, I used the results in addition to the research on prior methods to create the following series of movements, one for each of the six primary emotions:

1. Fetal position (fear): this can be used to achieve a spectrum of emotions, with the rate and speed at which the motion is achieved serving as working variables that determine whether the emotion is more grievous or anxious.
2. The reach (love/longing): standing at a neutral base, then extending one arm outward as if to reach for something creates a sense of longing. It is the feeling of wanting something so close, but not being able to get it, or possibly a regretful feeling towards a missed opportunity. With me, I had no noticeable difference in emotion with one arm vs. two, but it's perhaps something to explore with others.
3. The pound (anger): this movement is pretty much the same as Chekhov's slam, this is the move where you step forward, inhale as you raise your arms, then exhale and push forward with your body as you bring them down. For me, two hands elicited more of a feeling of frustration.
4. Kneeling prayer (sadness): this movement is directly linked to an overbearing sadness. Get on your knees and let the weight of everything carry your head forward and to the ground. Let the falling motion push the air out of your stomach. Place your hands at your side and take long, slow, controlled breaths. When I did this, I had some pent-up emotion that released during exhalation. My theory is that the trigger lies within the compression of the gut, as when I sit up straight it is easier to compose myself and when I kneel, and more specifically my gut is compressed, my emotion cannot be contained.
5. The spin (joy): With your chest held high and a smile on your face (or face relaxed), take a couple of broad steps with your arms swinging, then plant your foot and spin on it and begin to walk in the other direction. Be sure to lift the foot that is not planted into the air.

6. The gasp (surprise): Bring both hands rapidly to your mouth, inhaling as you do so. Then, slowly exhale as you bring the rag to your chest and relax your shoulders if the previous movement brought any tension there.

CHAPTER SEVEN: THE EXPERIMENT

In order to test the theory that motion elicits emotion, I created an experiment in the form of movement exercises. The experiment was relatively straightforward. A total of twenty-one participants were brought in in groups ranging from one to six people at a time. There were some demographics taken in order to deduce if there were any significant variables that shared common results. The demographics taken were: relationship status (single or married), age, race, gender, childhood household structure (two-parent, single-parent, multi-generational, etc.), and birth order. Additionally, precautions were taken to avoid bias in the results. The participants were not given any description that might allude to a certain emotion. They were also not

allowed to discuss their findings with the other participants between movements or during the writing sessions, lest their results be tainted by the others' results.

Once the paperwork was completed, the movement portion of the experiment began. The participants were led through the six motions listed in the previous chapter. I demonstrated the motions to the group, one at a time, and then allowed the group to perform the movements themselves for two minutes. When the timer went off, the participants had one minute to write down what, if anything, the motions made them feel. This is where the applications of Michael Chekhov and Anne Bogart's method came into play, as they were also asked to notate if slight alterations, such as rate, breath, or levels (i.e. taking a knee or lying on their back) affected the emotion or not. After their minute was up, they were given one more minute to do the movement again and one minute to write after that. This process was repeated six times in order to complete each of the motions.

The experiment fielded some interesting results. Several of the motions elicited the emotion assigned to them in the initial hypothesis. The strongest motions that resulted in the most consistent outcomes were the gasp and the spin (movements five and six). The gasp was meant to elicit a feeling of surprise on the inhale, and then a relief on the exhale. Some phrases used to describe what was felt are:

“So stressful and tense and on edge and then relieved a little but not much (still anxious) felt like panic mode.”

“When bringing my hands up and inhaling, I felt anticipation, then a release or calm when I brought them to my chest.”

“In breath made me feel anxious. Out breath was a relief. Like if something bad had just happened but all is well right after.”

Phrases such as this weren't found in every single participant, but 86% of them described that they felt some combination of grief, shock, surprise, and relief. The other 14% felt nothing at all as opposed to a different emotion.

The spin (motion five) likewise had fairly positive results. The spin was intended to elicit a feeling of joy, and for the most part the comments supported this prediction:

“This one made me feel very youthful and childlike.”

“This made me feel happy, carefree, and playful. I felt very childlike, but not in a necessarily vulnerable way. Made me want to laugh.”

“I felt happy and excited; I smiled during the movement more than any previous one.”

The majority of participants felt the emotion they predicted. 76% of participants used words such as “free” and “child-like” and “happy”, 14% felt confident, and 10% felt bored.

Some movements had mixed results, with some being similar to the intended emotion and some being diametrically opposed to the intended emotion. The kneeling prayer was indicative of this, as 71% felt relaxed, 19% felt anxious, sad and uncomfortable, and 10% felt a mixture of both depending on variables in the position that were changed. The initial emotion I predicted would be elicited (since this was the case when I performed the movement) was sadness. As the percentages show, this was not the case for the majority of participants. In this particular instance, I was the outlier. Some of the statements regarding this movement are:

“This was like falling, losing control. I did have my eyes shut this time. Defeated.”

“With this position I didn’t feel emotion. I went into almost immediate relaxation and lost train of thought, had a very clear space, my body went numb and I didn’t hear a thing around me until the beep.”

“very overwhelmed, small, distraught. Felt like I wanted to cry myself to sleep. Felt a little bit incapable/untrustworthy”

“Calm. Relaxed. Not much on my mind.”

Since the majority of participants found this to be more numbing and emotionless, I feel confident that with more experimentation to yield more accurate results, this movement has the unforeseen potential to serve as a motion that can neutralize the actor’s emotions and help them come out of whatever their prior emotional state was.

One fascinating result from my experiments regarded the reaching movement. The emotion I predicted it would elicit is a feeling of helplessness or longing. I was correct, as far as women were concerned. All female-identifying participants described something along those lines, with the only outlier being one female who used the terms “wonder” and “curiosity”. However, I started seeing a different trend among several of the male-identifying participants. Instead of asking for help, they described the gesture as making them feel as if they were offering help to someone. It only changed to helplessness if they physically lowered themselves to the ground and laid on their back, and then extended their arm forward into a reach. This created a sense of curiosity as to the gender implications here. Part of me is inclined to believe that geographical sociology is at play here, as Southern women, perhaps more than other Americans, are taught to be more submissive than men. This is something I want to research in

future papers independently in order to discover the significance with this particular motion and its potential relationship to gender.

CONCLUSIONS

We have seen that “[t]he body is a way of thinking about the points of connection between the person and the world” (Conroy 32). Bodies are not only the manifestation of

emotions felt by humans instead; these bodily actions precede said emotions. Movement is a universal language, as there is something incredibly innate and human about the relationship between the body and movement. This is especially “crucial for theatre, because action is the heart of the art” (Blair 17). Most importantly, in regards to acting, there is a significant amount of reassurance and unity in acknowledging that motion does, in fact, elicit emotion, and that emotion can then be shared not only between scene partners but with entire audiences. This is an excess not only for the actor but also for the audience:

“The spectator understands, consciously or unconsciously, that such an act is an invitation to him to do the same thing, and this often arouses opposition or indignation because our daily efforts are intended to hide the truth about ourselves not only from the world, but also from ourselves” (Grotowski 985).

Ultimately, theatre is meant to reveal this hidden truth within us that Grotowski mentions. It is meant to show us the human condition, be it in its most raw or absurd form. Motion elicits emotion for the actors, and in turn by seeing this movement, emotion is elicited from audiences. It is then that we see the power in theatre, but this research goes far beyond the relationship between actors and viewers.

There are a number of fields that can be impacted by this study when we realize that “thinking is unquestionably a bodily experience; it is simply a different form of action. It is the analysis of freedom, and not the knowledge of biology, that separates us from the fifth-century BCE Athenians” (Conroy 23). This paper only scratched the surface by showing the psychological ramifications as well as the relevance to fields like sociology, sports medicine, and more. Though early in the research, there are plausible applications for children on the spectrum

learning to communicate emotions. Additionally, one of the movements (the spin) seemed to engage with the hippocampus of the brain, and stimulated childhood memories in a few of the participants. This is something that needs more testing and a larger pool of participants, but there are implications that should this movement indeed be stimulating memories, it might be useful in therapy for patients with degenerative diseases of the brain. Nothing can be said for certain, as there has yet to be enough testing. However, the possibilities to this multi-faceted research project are endless, and it is exciting to bridge the gap between one of the oldest forms of communication and the scientific community. It is a bridge that I hope will only continue to grow as artists and scientists alike discover more about the body, emotions, and their impact on humanity as a whole.

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