ADVANCING CONJUGATE GAZE

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ADVANCED CONCEPTS IN REFLEX MIND-BODY THERAPY

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This book is respectfully dedicated to Mr. John Iams who discovered my work and became both a friend and mentor. His continual support and encouragement to further my work has served as a constant source of inspiration.

DISCLAIMER

No part of this book should be construed as medical advice for the diagnosis, treatment, or prescription of any medical condition, disorder, or disease. The author assumes no liability for its use whatsoever as this is an intellectual explication of a developing theory and practice to be used at the sole discretion of licensed practitioners of the healing arts within the scope of their license.

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INTRODUCTION

In 1997 I began organizing my thoughts on the development of a reflex based manipulative therapy. My original idea was to discover the mechanisms that integrated the somatic and neuro-emotional components of disorders, and how these integrated pathways manifested on both a physical and psychological level. Having studied Jung from a very early age I already had a foundation in the archetypal underpinnings of psychological phenomena and how they can reflexively manifest physically.

In studying the in-utero life of the developing embryo, Chamberlain reported a vast receptive field of somatosensory inputs as early as 8 weeks of development.[1] The developing fetus is already responding to incoming stimuli as the receptive network of sensory neurons trigger reflexive movements of the hands, head and trunk.[2] These somatosensory neurons that at first glance are unrelated to any modality other than sense perception are now known to be the first stimulus to activate the development of hearing.[3] Chamberlain has documented that as early as the 16th week of in-utero development the fetus begins to move its eyes,[4] and as difficult as it may be to comprehend, the fetus actually uses some sense of vision even during a period when its eyes are fused.[5]

David Chamberlain has reported that from the earliest stages of in-utero development, the fetus is already at work developing a host of neuro-reflexive responses to its environment. The fetus spontaneously begins to move in response to both intra and extra-uterine stimuli[6] in what can only be described as an orchestrated dance of head, limb and trunk movements. At some point between the 6th and 10th weeks of intra-uterine life the fetus begins to show an organized pattern of head rotation, and begins to move its hands to the head, face and mouth.[7] On an intrapyschic level this is the primal innate manifestation of an organizing energy known as the archetype.[8] This is the organizing agency that integrates the seemingly random and incoherent movements of a developing fetus, and creates a coherent expression of precise eye, head, and limb movements

that will one day be a foundation of extra-uterine life. It is important to recognize at this juncture that the patterns of intra-uterine movement so elegantly performed by the fetus are also movements that are performed toward and away from pleasurable and adverse stimuli.[9] The fetus is already using the eyes as an innate primal activator of central nervous system motor activity that archetypally or innately coordinates the movement of triadic eye, head and limb movement.[10] This exemplifies the great balance between the unconscious brain and conscious awareness even in relation to the earliest stages of development.

Chamberlain, in his referenced publication, recognized that the first fetal heartbeat was heard long before the actual development of the heart itself and occurred at about the 3rd week of gestation.[11] In much the same way, at about 16 weeks of gestation, the fetus begins to hear long before the development of the actual physical components of the ear.[12] This phenomenon in relation to hearing is pivotal to our understanding of how low threshold mechanoreceptor activation integrates multiple neural pathways, and restores normal balance through reflex mechanisms when adverse conditions prevail. Chamberlain in his paper on "The Fetal Senses"[13] discusses how hearing reception actually begins in the body with the skin by activating multi-receptor inputs. This is unconscious processing at its most defined level. The fetus is operating from a fully archetypal or primal orientation to the world, and as it bathes in the warm amniotic fluid of the mother, the fetal nervous system is fully at work preparing for extra-uterine life.

In the earliest moments after birth the baby will now enter the world as an extra-uterine embryo[14] being fully immersed in a symbiotic relationship with its mother. This symbiosis will have lasting effect, and in many ways can become a powerful instrument in the physician or health practitioners' relationship to the future patient. I previously discussed the "spatial field of interaction" that occurs between a therapist or practitioner and the client or patient. This is the environmental terrain that exists between the patient and therapist when they are engaged in active or passive communication. Each patient will set up what they deem is an appropriate or "optimal field of spatial interaction" that best accommodates their psychic space. This psychic space is their holding containment[15] of all the physical, psychological, and emotional energies that bring them to your care, and this is the time and place where the practitioner begins both the

assessment and therapeutic intervention in the Conjugate Gaze paradigm.

For a moment, consider the patient's perspective on the therapeutic environment. The patient sits within a dyad between the practitioner and him or herself. The patient sees the practitioner as someone whom they hope will understand the constellation of symptoms and factors that has brought them to your care. This is the critical moment beyond all other moments. For a brief moment in time the patient navigates back to a symbiotic dyad that was present only in the earliest stages of development. This is the time that the healing must begin. One of my colleagues whom I was once mentoring asked me when the healing began, and my only reply was, "the moment she walks through the door." This is the note from which the music must be played. In the forthcoming chapters I hope to convey the underlying principles that I have found to be the real organizing energies that underlie the Conjugate Gaze process. As you read I encourage you to see yourself as a dynamic participant in the patient's ongoing evolution toward greater and greater wholeness and overall physical and emotional wellbeing.

Before we begin our discussion of the dominant patterns of the eyes and body in relation to conjugate eye gazes and patent-assisted movements, practitioners should understand this fundamental principal in their use. The conjugate eye gazes are the predominant method of choice in activating central nervous system motor pathways away from the side of involvement, and facilitating an autonomic, parasympathetic and extrapyramidal response on the side of involvement and systemically. The conjugate eye gazes are the pivotal mechanism in activating the complexity of interactive motor, sensory, sympatho-vagal and extrapyramidal effects that work toward restoring normal function. The patient-assisted movements are less complex movements that activate central nervous system motor pathways through the pyramidal decussation away from the side of involvement, but probably spare the more global autonomic responses tied to the conjugate eye gazes. As a general rule for practitioners who want to follow a basic algorithm, the conjugate eye gazes are the first choice in implementing care. Once the eye gazes have been performed the practitioner can then follow with patient-assisted movements on the side of conjugate gaze to reinforce the correction. There may also be instances, however, when conjugate eye gazes are not feasible such as head trauma, post-concussive syndrome or ocular pathology. As patients improve with the use of the patient-

assisted movements in the context of their care the practitioner can then begin to implement the conjugate eye gazes as the more primary function.

In the next chapter I am going to present a more advanced method of evaluating how patients can be classified in relation to their eye movements and body movements. In this approach the practitioner can get a sense of how patients unconsciously use their eyes and body, and can then use this knowledge to implement the conjugate eye gazes or patient-assisted movements accordingly. Again, this is a more advanced approach that can be learned and employed as the practitioner is evolving in the understanding and use of the conjugate gazes and patient-assisted movements as just discussed. In the following chapter we are going to explore how patients interact in their environment, and the messages they convey with their eyes and body. The principles that are discussed are not hard and fast rules, but underlying ideas that can help practitioners better understand their patients, and help them to implement the appropriate therapeutic intervention.

CHAPTER 1

DOMINANT PATTERNS OF THE EYES AND THE BODY

In the same way that every patient operates from an optimal spatial field the same holds true for how patients unconsciously use their sense modalities when they are in the spatial field. In the Conjugate Gaze work the practitioner has to develop a working knowledge of his patients' mode of interacting with the environment. By observing the patient during the initial visit the practitioner begins to evaluate how the patient navigates and interacts with the immediate environment in which the practitioner co-exists. This information becomes the means by which the practitioner will begin formulating those components of the Conjugate Gaze technique that will best work with each patient.

When I meet a patient for the first time I engage the patient in a seated face to face diagonal position that quietly expresses a safe therapeutic environment.[16] In this position both the practitioner and the patient can fully engage themselves in full view, and the practitioner can observe how the patient uses their eyes and their body to express themself. This will start the process of unfolding the patient's dominant typology or mode of interacting. In the Conjugate Gaze work each patient is oriented toward a dominant typology. The typology, or primary mode of interacting, should be thought of as a fluid dynamic mode of primary interaction that the patient uses to best interpret and interact with the environment. Although there are many sense perceptions that can be used in classifying patient typologies, in the Conjugate Gaze work we will consider three sense modalities as primary modes of expression and interaction. The first typology is termed Eye Dominant. This is the patient who maintains a very close limb to body relationship, but who uses their eyes to take in continuous streams of visual information in assessing their environment. I have noticed that these are often the patients who

will describe their symptoms while conjugately moving their eyes away from the side of involvement. These patients are less likely to use their hands or limbs to touch the part that hurts, or physically demonstrate how an injury occurred. This is the patient who is a good candidate for the application of conjugate gazes during the therapeutic intervention, and may be less likely early on to respond favorably to patient-assisted movements. The second typology is termed Body Dominant. This is the patient who almost appears visually fixated or visually constrained. This patient maintains a fluid and expressive body language, but is less likely to take their eyes off the practitioner or an object of fixation during the therapeutic encounter. This is typically the patient who is quick to demonstrate how an injury occurred, and will often show exactly how they hurt themselves. In my work with post traumatic and physically traumatized patients, I often marvel at how they will reach behind their back or neck to grab or isolate the anatomy under concern, but yet never move their eyes out of a very limited visual field. This patient will usually respond favorably to patient-assisted movements during the therapeutic intervention as opposed to using conjugate eye movements too early on in the therapy.

The objective in using this typology is to identify the patient's primary sense modality as depicted by the patient in real-time. We must remember that the central nervous system is constantly working on an unconscious level toward homeostasis, and that the patient's mannerisms, behavior, eye gazes, and body movements are often tied into this function. In Conjugate Gaze we are always striving to keep the environment fluid and dynamic, and to resist the urge to anchor the patients' self-expression in any permanent way. Based on your treatment you may find that the patient begins to dynamically change in their primary mode of expression. This is a good opportunity to implement the opposing sense modality in the therapeutic paradigm perhaps shifting from conjugate eye gazes to patient-assisted movements or vice versa. This is the fundamental foundation of the symbiotic encounter. You not only allow the patient to change, but you are willing to change along with the patient. This is what I mean when I discuss becoming a dynamic participant in the therapeutic care of your patient. You deepen the symbiosis in a real and meaningful way that imparts a compassionate and empathic concern for the evolutionary development and wellbeing of your patient.

The third typology is Eye/Body Dominant or Mixed. This is the patient who is in a constant state of flux. This patient uses a broad range of limb and body movements while at the same time is constantly consuming visual streams of information often moving or darting their eyes during conversation. When these patients suffer with myofascial syndromes, I will often start the therapy using peripheral reflex contacts employing asymmetrical pressures which tend to focus them on the deeper pressure, and has a calming effect on their demeanor. This activates bihemispheric responses to the peripheral tissues, and activates a more focused response on the side of the deeper pressure. If the patient is suffering with bilateral spams of the trapezius with greater spasm on the right, I will perform a bilateral soft tissue manipulation of the trapezii with greater pressure on the right. I have found that the central nervous system always tends to correct on the side of the deeper pressure, and simultaneously focuses the patient's attention on the side of the deeper contact. A bilateral correction occurs with primary correction on the side of the deeper pressure. This patient is often the one suffering from ADHD, anxiety related disorders, obsessive-compulsive disorders, or similar neurotic constellations. However, that being said, I have also encountered patients who were overly expressive, and who used both their body and eyes conjointly during a therapeutic encounter. In this situation I will often choose an applicable intervention of either modality and then gauge the patient's response accordingly.

I think we can now understand why the patient-practitioner encounter is a vital component of the initial screening. In the diagonal face to face encounter the patient is allowed to unconsciously posture what is felt at that time.[17] The practitioner must insure that the therapeutic space is free from obstructing objects that might interfere with the patients' ability to express both their conscious and unconscious motivations.[18] It is this encounter that allows the sensitive practitioner to initiate and engage in the "orienting eye reflexes"[19] so necessary to establish a firm "I-Thou"[20] relationship which should be the cornerstone of the compassionate Conjugate Gaze practitioner. It is this encounter that establishes the trust and empathy that every patient must confirm in order to open them to the therapeutic intervention. It is important that practitioners understand that the healing process is more than the modality employed in the process, and that patients heal from within. For those practitioners who want to understand and use Conjugate Gaze, I cannot over emphasize the value and fundamental need to establish a strong

patient-practitioner relationship. The term Conjugate Gaze should be interpreted to mean all those meaningful visual contacts that the practitioner is able to capture with his patient. This is the initial therapeutic intervention that evolves to become the actual conjugate gazes and patient-assisted movements that the practitioner will ultimately employ.

Once the dominant typology has been established the practitioner can then proceed to formulate the specific approach to the patient. If the patient is determined to be eye dominant then the initial protocol will proceed with conjugate eye gazes being the primary mode of intervention in conjunction with the peripheral reflex contact or manipulative technique. The same will apply to the body dominant patient. In the case of the eye/body dominant patient, I have often found that patient-assisted movements tend to facilitate a better initial response. Patients who suffer with maladies that fall into this category tend to negatively respond to eye movement interventions initially. I have found the same to be true in patients who have suffered traumatic brain injuries.

CHAPTER 2

THE CONJUGATE GAZE MECHANISM

Let's briefly review the conjugate gaze mechanism. In pure lateral gaze the contralateral cerebral hemisphere activates motor control over the ipsilateral abducens nucleus in the pons and the contralateral oculomotor nucleus in the midbrain to conjugately move the eyes. Thus, the ipsilateral lateral rectus and contralateral medial rectus conjugately move the eyes, and this occurs under the coordinating influence of the Center for Conjugate Gaze in the paramedian pontine reticular formation in the pons. The conjugate gaze mechanism is closely aligned on a neurological level with the mechanism of central nervous system motor activation through the pyramidal decussation; they both follow the law of contralateral dominance or innervation.[21] It was this aspect of conjugate eye movements and contralateral dominance or innervation that became the basis for the Conjugate Gaze work.

Now, when a peripheral reflex contact is applied to the body it is recorded in the opposite or contralateral cerebral hemisphere in much the same way that a conjugate eye gaze is activated by the opposite or contralateral cerebral hemisphere. This paradigm of contralaterality is the pivotal component in the Conjugate work. The most important facet of this mechanism of contralaterality is how the nervous system is constantly looping its neural inputs through the brain. Through an evolutionary development, the ontogeny of the human brain has developed reverberatory loop circuits that are manifestly operating between the hippocampus and the neocortex.[22] We see this most explicitly in relation to memory, and also in relation to the movement of dream characters during REM sleep. Although you may wonder what possible relationship the movement of dream characters can have to the Conjugate Gaze work, it is this very mechanism that may very well be at work during the Conjugate Gaze applications.

J. Allan Hobson in his work in dream physiology has documented that the movement of dream characters during REM sleep is directly linked to the conjugate or staccato eye gazes.[23] In other words; there are precise neural networks that function on a subcortical level processing internal and external inputs that ultimately loop into a hierarchical circuit of neural expression. The pivotal point in this entire paradigm, however, is that the same mechanism that triggers REM sleep and the movement of dream characters may be the same mechanism that is at work in the waking state[24] when we activate conjugate eye gazes therapeutically. Pontine-geniculate-occipital cortex waves or PGO waves appear to be the centrally mediating mechanism responsible for activating the three way acetylcholine dependent process of REM sleep. This process occurs as a triadic activation of the onset of the rapid eye movements, the activation of pontine giant cells, and the discharge of the brain-stem frequencies known as PGO waves.[25]During this process the acetylcholine meditated induction of REM sleep activates an inhibitory loop that suppresses the dopamine-norepinephrine circuit reciprocally and has an inhibitory effect on serotonin.[26]

The central component that makes this important and applicable to the Conjugate Gaze work is that these same mechanisms parallel a distinct economy of neural processing that we know occurs in the waking state especially in relation to conjugate applications. Take for instance the use of a peripheral reflex contact on low threshold mechanoreceptors or a post-ganglionic contact over a visceral fascial plane. The application of the peripheral reflex contact activates what is known as the "parasympathetic reflex response"[27] that increases vagal tone and simultaneously is associated with increased EEG activity in the neocortex and decreased EMG activity at the local level of the tissue.[28]These are acetylcholine mediated inputs that loop in central nervous system pathways inhibiting sympathetic nervous system circuits, and decreasing the dopamine-norepinephrine effects of sympathetic innervation. This effect is amplified when conjugate eye movements are therapeutically employed and further activate acetylcholine processes centrally. This may be the very mechanism that responds to the triadic activation of REM sleep when PGO waves are discharged by the pontine giant cells.

As should by now be apparent to those following the evolution of Conjugate Gaze, the actual neural mechanisms underlying even the simplest application of the procedures, by far out distance the simple regulation of neural pathways. Conjugate Gaze should be

viewed as a more neurologically based mind- body therapeutic process that seeks to integrate and balance the patient in a process of therapeutic recovery from the multiple layers of disorder that brings the patient to the healer. In the therapeutic application of conjugate gazes, I view the conjugate gaze mechanism as a central regulating agency that facilitates an integrated balance of autonomic outflow and somatic innervation.

CHAPTER 3

C.G. JUNG AND THE ARCHETYPAL NATURE OF CONJUGATE GAZE

One of my most often asked inquiries about Conjugate Gaze is the question about the archetype. What exactly is an archetype? Before I embark on the path of defining the archetype or the archetypal nature of Conjugate Gaze, I think we would be better served by understanding a little bit about the man who popularized the term. Carl Gustav Jung was born on July 26, 1875 and studied medicine at The University of Basel between 1895 and 1900.[29] Jung was an avid reader in philosophy and theology and eventually in 1900 became a physician at the Burgholzli mental hospital in Zurich under Eugen Bleuler.[30] Perhaps Jung is best known for his association with Sigmund Freud when Freud was developing and popularizing his theory of psychoanalysis. Eventually Jung was deemed to be Freud's crown prince of sorts and was to lead the psychoanalysis movement into the future. However, as fate would have it, Jung could not rest comfortably with Freud's psychosexual theory and was himself more transcendent in his views on libido. It was this basic divergence of thought that ultimately led Jung away from Freud's reductionist thinking and into his more creative and synthesizing psychology. Jung believed that all human beings are collectively integrated from a common origin that is accessible and can be a source of higher transcendent value. He referred to this common origin as the collective unconscious, and believed that it could be approached through one's personal unconscious by analytical methods which he eventually developed as his analytical psychology.

In Jung's view, every human being has an organizing principle that exists outside of space and time, but that is at work within the psyche evolving organizing patterns of insight and behavior.[31] This is the archetype. This organizing principle, however, is only accessible to the human psyche as images or ideas[32] that emerge in our personal

unconscious from the outer limits of our ability to access it. It is this organizing principle that I believe is the underlying basis for the corrective patterns that emerge when appropriate therapeutic interventions are applied to our patients.

CENTRAL NERVOUS SYSTEM REORGANIZING DRIVE

I think we can now proceed to an understanding of how my view of the archetypal nature of Conjugate Gaze operates within the central nervous system. The central nervous system is a self-organizing structure that is constantly at work maintaining and defining the limits of normal function. However, as is often the case, the human body undergoes countless and myriad changes that bring central nervous system function outside the limits of normal function. Once homeostasis is breached it becomes the domain of the central nervous system to reorganize itself, and respond to the dysfunctional state by activating both signals of alarm and signals of correction. This is the critical domain. It is at this juncture in the therapeutic process that the health care practitioner is usually called upon to intervene. The patient is ill and may be suffering from any malady that has upset the normal structure and function of the body. This is not to say, however, that the patient cannot be suffering from an emotional insult that is just as capable of upsetting normal nervous system function as a physical illness.

Let us take the example of the female patient who comes in with fibromyalgia, headache, anxiety, and is recovering from a urinary tract infection which has recently been treated. She is uncomfortable, her muscles are aching, and she has been incapable of getting a good nights' sleep. I'm sure this case doesn't sound too unfamiliar. This patient is determined to be eye dominant and the practitioner decides to approach the patient first from a cranial position and to then proceed to the body. The practitioner palpates the fascial plane of the cranial sutures and finds a primary restriction over the occipitomastoid sutures. At the moment of contact on the occipitomastoid sutures the lesser and greater occipital nerves are activated and facilitate bihemispheric cortical responses via low threshold mechanoreceptor activation that activates the parasympathetic reflex response.[33] The parasympathetic outflow is immediately associated with an increase in cortical activity and a reciprocal decrease in the peripheral tissue.[34] This response is in effect a result of a central nervous system reorganizing drive that was activated by the initial manipulative contact over the occipitomastoid sutures. You can think of this reorgan-

izing drive as a responsive element to the neural input of the mechanoreceptor contact that signals a focused attention[35] on the part of the central nervous system. The parasympathetic reflex response is immediately recognizable to the practitioner because the patient almost invariably responds with an immediate sigh of relief. This response on the part of the patient never ceases to amaze me. Here the patient may be suffering from a lower urogenital complaint and upon immediate manipulative contact of the occipitomastoid sutures she responds with a systemic sigh of relief.

This example appropriately depicts the archetypal component of the central nervous system. There was no pharmacologic intervention that was present to activate any phamacodynamic effects on the body, but yet the central nervous system was positioned to respond in a psychodynamic way. This psychodynamic facilitation of the central nervous system is the innate reorganizing principle that is responsive to the practitioner's therapeutic empathic touch. By the same token we can take the example of the post-traumatic stress disorder patient who has a primary body dysfunctional disorder, but who is also suffering with serious overriding emotional issues. In this example the central nervous system is usually in a hyperpathic state and the patient is often wrought with anxiety and depression. I have often found that when a patient is under emotional strain such as the one described here they are usually very responsive to the Conjugate Gaze approach. If you consider for a moment the symbiotic encounter that the Conjugate practitioner engages with the patient you recognize that the safety of the holding environment is immediately established. In "Language of the Archetype"[36] I coined the term "archetypal dyad" to depict the symbiotic but unconscious relationship that develops between the patient and the practitioner when a real compassionate caring is present. It is my firm belief that there is no greater way to facilitate the central nervous systems' reorganization than to start with the empathic symbiosis of the primal relationship. This is the language of the central nervous system and is what I commonly refer to as "archetypal language."[37]

The Conjugate practitioner soon realizes that there is an underlying psychodynamic system at work in Conjugate Gaze. The term "psychodynamic" is meant to imply all the conscious and unconscious drives that facilitate a particular expression within the human body. It is for this reason that I overemphasize the vigilance needed to insure the gentle non-forceful application of the techniques. In the primal symbiotic relationship the central nervous system is at work in