

Sharing Space

To Be or Not to Be: Prenatal Origins of the Existential “Yes” v. the Self Struggle

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Abstract: Lifelong effects of conflicted pregnancy are explored from the perspective of the “mistakenly” conceived baby and the adult he/she becomes. Braiding current and classic research with her experience as an adoptee, the author focuses on first trimester influences upon an individual’s predisposition toward optimal growth versus chronic existential struggle. Examples of stage-specific first-trimester imprints; discussion of reward circuitry damped through adaptive mutation; relevance to adoptees’ heightened psychosocial vulnerability; “perception hygiene” and healing; and implications for abortion are offered. The conclusion spotlights a potent avenue of hope (as in Pandora’s unpacked scary box) abiding as a developmental substrate and healing resource.

Keywords: conception, adoption, suicide, embryology, abortion

As someone whose conception was an unintended surprise and who was carried in an ambivalent womb for those tumultuous months and ultimately relinquished to others to raise, most of my writing and teaching is imbued with the impulse to make sense of what it means and how it feels to live a life whose beginnings were complicated in those particular ways.

It has been a circuitous, layered affair – rife with messy conundrums and spiral strata of intuitive hunches, ah-hah epiphanies, connect-the-dots hypotheses, and slowly coalescing understandings in this lifelong qualitative investigation with an *n* of one.

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What does it mean for an individual to have been conceived “by mistake”? To have caused disappointment, anguish, or worse by the simple act of one’s arrival? To have been carried amidst a mother’s conflicted psychosocial circumstances?

Significant interdisciplinary literature has accrued (Axness & Evans, 2014; Buss, Entringer, & Wadhwa, 2012; Glover, 2011; Green et al., 2011; Huizink, Mulder, & Buitelaar, 2004; O’Donnell, 2013; Schlotz & Phillips, 2009; Tremblay & Soliday, 2012; Wendling, 2006; Zucchi et al., 2013) to shed more light on a terrain initially charted decades ago by intrepid clinicians whose pioneering conceptualizations bring enduring meaning to lifelong effects of challenging prenatal circumstances. These speak to a theme made most famous by Shakespeare’s Hamlet: “To be or not to be?”

Bertil Jacobson’s landmark research revealing that young adults attempted suicide using methods that corresponded with the circumstances central to their birth traumas (e.g., forceps became guns/knives; narcotic labor analgesia became drug overdoses; cord-around-neck became strangulation or gas asphyxiation) (Jacobson et al., 1988) has classically been seen—due to the poignant specificity of their chosen methods—as evidence of fetal procedural memory, reenacted decades later. Methods aside, might we see their acts as attempts to “not be”—to complete what was perceived in the birth trauma as a biologically mediated instruction to not exist? And might such biologically transcribed instructions be received far earlier in prenatal life?

Conception

Existential implications of conception were first plumbed by several brave clinicians, one of whom suggested, “To have a place in the world of the mind, we must first exist as an image in the mind of another. That is, we must first be given a place in the mind of another, then we can have a place for our own image in our own mind” (Pesso, 1990, p. 35).

The late psychiatrist John Sonne elaborated further, with his thesis

... that babies are conceived psychogenetically at the same time that they are conceived physically. The manner of their conception becomes an *unthought known* as part of their being ... —something known but out of awareness—that will prenatally and postnatally influence all the baby’s postconception experiences, including the baby’s relationship with himself or herself, with others, and with God. The unthought known will continue its influence even if the child learns the facts later life of the actual circumstances of his or her creation, unless this conscious knowledge helps the child to access and process his or her unthought

known and the positive or negative feelings associated with it (Sonne, 1997, pp. 61-65).

The unthought known of an intended or unintended conception can be seen as a sort of psycho-spiritual mandate, a tendency *toward* life, growth and furtherance—the existential *Yes*—or a tendency *away* from life, growth and furtherance—the existential *No*. “To the degree that a child was not intentionally conceived or wanted, or finally accepted into the mother’s and father’s heart, it will not feel connected,” writes Wendy McCord (McCord, 1997). Sonne reminds us of Sandor Ferenczi’s classic article, “The Unwelcome Child and His Death Instinct”, in which the psychoanalyst articulates attributes observed in patients who “came into the world as *unwelcome guests of the family*” (Ferenczi, 1929, pp. 126, italics his), and theorizes that there is, indeed, a tendency away from life at work in such individuals:

I only wish to point to the probability that children who are received in a harsh and disagreeable way die easily and willingly. Either they use one of the many proffered organic possibilities for a quick exit, or if they escape this fate, they keep a streak of pessimism and of aversion to life (p. 127).

The child has to be induced, by means of an immense expenditure of love, tenderness and care, to forgive his parents for having brought him into the world without any intention on his part;¹ otherwise the destructive instincts begin to stir immediately. And this is not really surprising, since the infant is still much closer to individual non-being, and not divided from it by so much bitter experience as the adult. Slipping back into this non-being might therefore come much more easily to children. The “life force” which rears itself against the difficulties of life has therefore not really any great innate strength, and becomes established only when tactful treatment and upbringing gradually give rise to progressive immunization against physical and psychical injuries (p. 128).

To Grow or to Not Grow?

I’m reminded of my own serious pneumonia at six months of age, and the classic study that found unplanned newborns 2.4 times more likely to die in their first month than matched newborns who were planned conceptions (Bustan & Coker, 1994). And that I was always thin—skinny

¹ From a spiritual/cosmic perspective, I think it is debatable whether or not the “unwelcome” child comes into physically embodied existence without intention on his or her part.

even—and undeveloped, despite my very average-sized biological parents. And could I have been re-experiencing this tendency toward nonexistence when, so often in my life, I have felt a sense of “fading borders,” a recurring loss of sense of where—and *whether*—I am? While that is surely related to psychosocial developmental issues of impaired differentiation of self from Other (e.g. Sidoli, 1989; Stern, 1998), perhaps this dynamic finds a primal neurobiopsychological substrate in the early days of cellular life and a quiet but powerful echo tugging toward existential absence.

In his discussion of how stress impacts the mother-fetus relationship and the growth of the embryo-fetus, Jean-Pierre Relier (2001) identifies four significant periods: creation, conception, the embryonic phase, and the fetal phase. He perceives the creation phase in similar terms as Sonne and Pessio, suggesting that “this period, very poorly recognized by clinical doctors, corresponds to what is called ‘*grossesse psychique*.’ For psychoanalysts and psychiatrists, this is the time when a man and woman who are in love have the desire of creation, of having a baby. The infant appears as a real ‘materialization’ of total love between two complementary human beings ...” (p. 169).

Relier characterizes conception and implantation as “*grossesse physique*” due to the union of ovule and spermatozoon in the fallopian tube, and goes on to elucidate a possible psychobiological causal pathway for the aforementioned association between unwelcome conception and the anti-life/anti-growth tendency. He highlights research that isolates IGF¹ and IGF² (intrauterine growth factors) receptors on the surface of the ovule, and that suggests that the relative distribution of IGF¹ and IGF² varies not just according to the timing of ovulation/conception/implantation, but also as a function of *the mother’s psychoaffective quality*. Relier writes,

This means that psychological stresses in the mother could act on the action of IGF², which is responsible for the placental vascular organization. These data are relevant and point out the fundamental importance of a real psychoaffective equilibrium of the parents as well as the conscious and unconscious in the quality of early growth of the embryo and placenta, preventing intrauterine growth retardation, prematurity, maternal hypertension, toxemia and early miscarriage (2001, p. 169).

Indeed, it has been found that the relative importance of IGF² is far greater early in gestation, and that IGF² and its transcripts are present as early as the two-cell stage of development. Could this then be one causal pathway involved in the connection between unwantedness and a higher risk of neonatal death? When, based on the above research, as early

as the two-cell stage of development the (biochemical) message is, *Don't grow?* We must remember that in the scope of human history it was a mere nanosecond ago when mothers had to differentially ration their commitment and meager resources amongst their many children; an unwanted child—especially one who was sickly or troubled—would place a strain on the family and even present a threat to the continuation of the familial line (Hrdy, 1999). Could it be that a biochemically mediated mandate for an unplanned baby to not survive, or at least to not thrive (and thus perhaps succumb in infancy, as so many pre-industrial newborns did), is part of an evolutionarily adaptive developmental system?

Stress, Malattachment and the Unfolding Self Sense

It is well-established that chronic stress inhibits growth (Stratakis, Gold, & Chrousos, 1995) and can derail normal development (Denver, 1999). Cell biologist Bruce Lipton (2002) points out the mutually exclusive postures of protection (i.e., the survival posture adopted under stress) and growth (only possible in the absence of threat or stress) in every stage and at every level of development. Ideally, the early unfolding of awareness of an autonomous self is not a stressor, but emerges effortlessly and imperceptibly from a state of undifferentiated oneness with the mother (Mahler, cited in Verrier, 1993). Regardless of the degree to which he perceives himself as still merged with his mother, disrupted attachment (what I term *malattachment*—e.g. misattunement, neglect, abuse) plunges an infant into a wrenching existential paradox: since the source of the pain is the mother/self, any turning away or attempt to shunt off the source of the distress is a turning away from oneself. Psychoanalyst Lynda Share suggests that “the trauma can never be separated from the person of the mother, because the trauma *is the mother*. Since the infant's very life depends upon his mother, the infant truly has no way out. The only thing left for him to do is to compromise an aspect of his own self, his own mind, in order to continue to exist in such unbearable circumstances” (Share, 1994, pp. 237, italics hers).

The work of Emerson and other pre- and perinatal psychotherapists (e.g. Grof, 1976; House, 2000; Maret, 1997; Verny, 2002) suggests that this same existential paradox is posed to the embryo by such early prenatal traumas as unintended conception, tentative implantation journey, difficult/rejecting implantation, and the pre-discovery and discovery periods. Emerson points out that while the ego begins functioning in the third trimester, and primitive ego defense mechanisms such as splitting and dissociation become functional in the first year, an embryo and fetus during the first two trimesters is completely without any defense against

trauma, and has no option but to in essence turn away from herself at the deepest level of self (Emerson, 1993). Here Annie Reiner's words—coined about infant trauma—ring achingly true, that in this process a strange irony occurs: a “psychological death” at the very first moments of physical life (cited in Share, 1994, p. 52).

Some thus hold that narcissism has its beginnings *in utero* (Kestenberg & Browitz, 1990); indeed, through his years of pioneering work in primal therapy, Frank Lake determined that the delicate first-trimester developmental processes had the most powerful, lasting effects on a person, and that they are “the time and place of origin of the common personality disorders, as well as psychosomatic reactions,” (House, Landis, & Umberson, 1988, p. 232) and other disorders. In his remarkable clinical portrait, *The Pre- and Perinatal Development of a Sense of Self*, Jeffrey Von Glahn shares the pre- and perinatal recollections/reconstructions of a woman who experienced this kind of existential dilemma as “a continual assault on her developing sense of a *self*, and which eventually resulted in a dissociation that caused her to not experience herself as a needing, wanting person; or in her words, as not having a *me*” (Von Glahn, 1998, p. 155). Indeed, in an imprint of fundamental *wrongness* that is common among those who experience first trimester trauma, “Jessica” was “terrified that she had been ... *made up*, with a *flaw* in the basic structure of her humanness,” the result of which was that,

You see, I had to give me up. ... This part of me that cared about anything, that loved and needed and wanted, the real human being in me, I had to send “her” away. ... I had to scrape my “human being” out of me and let “her” float off. ... I sent “her” away because “she’s” bad and no good (Von Glahn, 1998, p. 164).

The absence of embryonic and fetal ego defense mechanisms, as well as the still undeveloped parasympathetic—or *calming*—branch of the autonomic nervous system, is why severe prenatal stress or trauma is characterized within many psychotherapy models as the most extreme form of global shock trauma (e.g. Levine, 2002). This little-recognized dimension of the trauma continuum can be helpful for those with “inexplicable” PTSD symptoms that don’t relate to any remembered experiences.

The Past is Never Past

When William Faulkner wrote, “The past is never dead; it is not even past,” he could have been describing the potential of prenatal experience

to echo through a person's life again and again. Lynda Share (1994) proposed the notion of trauma as an "organizer of experience"—I call them templates—whereby future experiences that perhaps have only the vaguest resemblance to the original trauma are drawn into the shape of the original painful episode(s), triggering associated primitive nervous system responses and neurochemical profiles (p.236). The same may hold true—even more true—for foundational traumas occurring in the earliest phases of physical and psychoemotional development. These templates Share sees as being formed by trauma draw one repeatedly back to the scenes of one's own early wounding—perhaps, as is suggested by many, to ultimately find a way to integrate them into an ever-healing sense of self.

Emerson refers to this shaping power of early trauma as acting like a "tincture" on later experience, and describes its iterative, positive-feedback-loop nature using a birth trauma as an example:

... life experiences are perceived in terms of prior and unresolved traumas. When a baby is stuck during birth, the baby is likely to perceive later events as entrapping, or to unconsciously manipulate or choose life situations that bring about entrapment. This process is called recapitulation. Secondly, similar or recapitulated events, independent of perceptual processes, are likely to reinforce prenatal traumas, resulting in relatively chronic symptoms. In the case of the baby just described, childhood events acted as reinforcements for the birth trauma, resulting in chronic claustrophobia (Emerson, 1996, p. 126).

There are countless opportunities in our daily lives for challenging first trimester tinctures to act on daily events. The tapestry of ways in which prenatal templates impress themselves (implicitly, out of conscious awareness) onto current experiences is huge and variegated, most comprehensively covered in entire books—such as Elizabeth Noble's (1993) excellent *Primal Connections*—not mere paragraphs. By way of a few examples:

The simple act of *entering* (a party, a store, a lecture hall) or doing things that involve union and cooperative creation (team project, group game, etc.) might arouse anxiety borne of inarticulable memories of violent, angry, or simply undesired conception.² Experiences involving connection and communion (relationships of all kinds, sometimes even passing, inconsequential ones) and of finding one's place (looking for an apartment or house, even just a temporary home in a hotel or guest room)

² We now know that optimal conception doesn't simply involve an "active" sperm penetrating a "passive" egg, but rather, a cooperative reciprocal embrace.

can stir affect traces of a negative or unreceptive welcome in one's first experience of connection—implantation in the uterus. Not being able to find or really feel one's place, not being able to hold on, to settle in, etc., may find their origins in this earliest struggle to attach, i.e., the first strains of a malattachment relationship.

The pre-discovery period (prior to the mother learning of her pregnancy) is about feeling safe to reveal oneself, to voice one's presence. Opportunities for traumatic pre-discovery to tincture everyday life may occur when we are faced with announcing ourselves and speaking up (and finding it hard to do so)—in a meeting, in a restaurant, in a doctor's office. The discovery phase—when a woman learns for sure that she is pregnant—can lay lifelong templates for feeling seen, acknowledged, celebrated,³ and for being *received*; if someone often feels hurt or anger over a gift or other offering that isn't satisfyingly received, that may point to a traumatic discovery. The ensuing gestation is the foundational experience of getting one's needs met, of being taken care of, of feeling safe—or not.

Clearly, these traces are difficult to tease apart from, say, those created by malattachment during infancy and toddlerhood, which also confer lifelong lessons and templates about being seen, acknowledged and celebrated, and about having one's needs met. Attachment (and malattachment) is increasingly understood as a continuum that begins far earlier than conventionally acknowledged (Brandon, Pitts, Denton, Stringer, & Evans, 2009; Condon, 1993; Doan & Zimmerman, 2004; Tremblay & Soliday, 2012); and furthermore, prenatal misattunement confers a profound vulnerability to postnatal malattachment (Pesonen, Räikkönen, Strandberg, & Järvenpää, 2005; Werner et al., 2007; Yim et al., 2009).

From the standpoint of the lifelong effects of lived experience, this distinction between prenatal and postnatal may be academic; both sculpt vulnerability into the new organism. The embryo and fetus of a chronically stressed mother “learns” at the level of biochemistry that the world is dangerous, and life may be brutal and short (Davis et al., 2007). If a pregnant mother's thoughts and emotions are *persistently* negative, if she is under *unrelenting* stress, the internal message delivered to the developing baby is, “It's a dangerous world out there,” regardless of whether or not this is objectively true. The baby's nascent neural cells and nervous system development will thus mutate to prepare for the unsafe

³ David Cheek once said that when the mother's reaction to her pregnancy is negative, the fetus feels as if he's been invited to a dinner party and then asked to leave upon arriving (Noble, 1993, p. 166).

environment into which he anticipates being born (Buss et al., 2012; Glover, 2011; Green et al., 2011; Grizenko et al., 2012; Wadhwa, 2005; Zucchi et al., 2013).

When a baby in the womb is continually exposed to maternal cortisol, he expresses his distress with an accelerated fetal heartbeat and hyperactivity, while his developing brain's set points for the ability to effectively manage stress are permanently being down-regulated: the hormonal feedback system designed to keep his experience of stress within normal levels is damped, leading to lifelong hypersensitivity to what would normally be benign stimuli. Along with this hypersensitivity to minor environmental stimuli that prenatal stress hardwires into the baby's brain, there is also an impairment of the baby's (calming) opioid system; in other words, the brain-based ability to experience pleasure and contentment, or what Peter Kramer termed "hedonic capacity," is corrupted.

So not only is this individual going to be more prone to experiencing the environment as stressful, he will get little relief from the action of the brain's pleasure axis, which would normally help mediate the effects of stress by engendering feelings of satisfaction, reward, and contentment (Bogdan, Nikolova, & Pizzagalli, 2013). This person loses wellbeing from both ends, so to speak—feeling hammered by distressing stimuli while never quite able to feel much at ease or gratified by positive stimuli. It follows that down-regulation of these fundamental neurochemical receptors is present in depression and other mood disorders (Whitton, Treadway, & Pizzagalli, 2015).

In his gripping book *In the Realm of Hungry Ghosts*, Gabor Maté proposes that the mainspring of addiction is this kind of steeply imbalanced circuitry in the brain's self-regulating structures, which haven't been adequately developed through secure early attachment relationships. He has observed that addictions of all varieties are an attempt to activate pleasure and reward circuits in a brain whose receptors have been reduced in number or sensitivity due to early adverse experiences. Oxytocin did not flow freely and frequently enough for the stress and reward axes to attain their intended capacity for maintaining inner balance. This leads the individual to rely on *external* soothing and regulation to (ultimately unsuccessfully) make up for the *internal* capacities for such centering that weren't internalized when they should have been (Maté, 2010).

Of key relevance to the current discussion is that reduced numbers and sensitivity of endogenous opiate receptors during fetal development is associated with lifetime changes that include increased aggression, lower cognitive performance and decreased exploratory behavior (Insel,

Kinsley, Mann, & Bridges, 1990; Sandman & Yessaian, 1986)—all of which comprise a protection-rather-than-growth profile consistent with self struggle.

Most of my previous body of work has been on adoption, particularly such primal issues as separation at birth and even before, as I'm exploring here: the psychosocial impact of having been carried in an ambivalent or outright rejecting womb, perhaps by a mother contemplating abortion; and having been conceived without being intended. The experience of adopted people has so much to teach us about the impact of these early processes; reciprocally, researchers could mine prenatal psychology for important insights into what has for decades been a persistent social science riddle: *What, that we've yet to identify, contributes so saliently to consistently higher levels of psychosocial vulnerability in adopted people?*

Adoptees are consistently overrepresented in clinical, therapeutic, and correctional settings. Although they make up only 2 to 3 percent of the general population, over 7 percent of special education students identified as emotionally disturbed are adopted (Brodzinsky, 1991), and adopted adolescents comprise anywhere from 5 to 20 percent and higher of caseloads of mental healthcare professionals (Shelton & Rubin, 2008). In his aforementioned book illuminating associations between disrupted attachment and addictions, Gabor Maté details several ways in which the prenatal and perinatal experiences of adoptees render them neurophysiologically more vulnerable to various disorders, such as ADHD—indeed more prevalent in adopted youth—which in turn heightens their risk for addiction (Maté, 2010). He points out that many adults who were adopted as infants “harbor a powerful and lifelong sense of rejection,” and includes the sobering statistic that the suicide risk for adopted adolescents is double that of their nonadopted peers (Slap, 2001).

Researchers who use the reports of adoptees (or others who were separated from their mothers at birth for a substantial length of time) find they use terms like “alien,” “rootless,” “flotsam,” and “in limbo” to describe themselves. One study (Abbott, 2000) found three salient themes of the narratives of adopted adolescents: “a) a sense of ‘homelessness,’ b) an experience of being different, not belonging, or of having fallen ‘out of everydayness,’ and c) a profound estrangement from generally taken-for-granted realities such as the security of parental relationships. As a result of these themes or issues, participants, particularly those involved in treatment, often felt anxious, ungrounded, and unworthy....”

I don't embrace a hand-wringing, doomsday attitude that pathologizes adoptees and adoption; once we expand our perspective and apply an *adaptive* lens to adoptees' behaviors and “disorders,” we can see them as brilliant adaptation strategies that have gotten stuck and become

disruptive rather than adaptive. An adaptive lens interprets a child's behaviors and expressions *in light of what they have experienced*.

How Then Shall We Be?

Throughout life, our endocrine, immune, and nervous system functions are powerfully influenced by our perceptions—the story we tell ourselves (even subconsciously... in fact, *especially* subconsciously!) about what we're experiencing (Lipton, 2005). Our perception process works 24/7 like a crazy-fast computer filtering the millions of incoming nano-bits of life's information and selecting those that match the shape of our templates, forming the story we perceive to be "reality." Our most potent attitudes and responses to life are automatic and reflexive, based upon these perception templates.

For those whose early prenatal circumstances engendered the kinds of implicit templates and stress-primed neural circuitry discussed above, living a full, satisfying life may require that we compassionately explore our inner responses, dialogues, and perceptions with the questions, *Is this truly my story in this moment, or is it an echo of circumstances that hurt me very early? Do my templates invite growth and thriving, or do they persuade me (once again) toward not-being? Do they lead me to gravitate more naturally toward entropy rather than harmony as an organizing life principle?*

This unbraiding of past and present, of putting one's story pieces where they belong and understanding the sources of one's most primal responses, is the work of healing, which can be a lifelong journey. For someone with highly conflicted beginnings, the simple process of enjoying life can be, to put it bluntly, a lot of work: a pursuit via myriad therapeutic modalities to plumb for one's true essence, while shoring up what is frequently impaired physical energy or wellbeing (Shonkoff et al., 2012). It can be like trying to push a car with a flat tire uphill in gravel: if one works very hard, keeps one's shoulder into it and never lets up, there can be some forward movement: diligence plus neuroplasticity can result in healthier neural pathways to overlay early templates. But if attention is relaxed and stress is turned up; if awareness is tuned to something else, like "just living," gains can slip. Living life beyond the limiting shape of early templates can demand a tenacity of "perception hygiene" so unremitting that this vigilance itself becomes existentially tedious, tapping the individual right back into their templates of "life as struggle to be."

Profound Paradox

Someone who has lived like this can perhaps more readily entertain unaddressed gray areas in mainstream abortion debate rhetoric, which overlooks *qualitative* aspects of lives that anti-choice activists purportedly seek to save. Many spiritually-oriented therapists and counselors working with women planning to terminate unwanted pregnancies help their clients establish—through prayer, imagination, art, letter, dance, song—a level of communication and communion with the newly-arrived being in their wombs through which they explain to the baby that it isn't the right time for him or her to come, and that it is necessary to separate. Many write farewell letters or songs. Those who have worked a good deal with this approach have reported an unnaturally high rate of spontaneous miscarriage in these women prior to their scheduled abortions (McGarey, 1997), raising the virtually unexplored question of whether the embryo might in some cases cooperate in conscious termination. Such an attitude of reverence, of courage, of willingness to enter the deepest mysteries of life and death, also invites in an awareness of the meaning of the entire experience, and the meaning that the life of even a three-week old embryo can have.

And perhaps it is there, in the embryo—in each of our own embryonic histories—where we may find an existential “Yes” that preceded whatever struggles imprinted us as fetuses, newborns, infants and beyond. Within a biodynamic embryology framework (Van der Bie, 2001), the first two weeks of human physical existence—marked by fluid movement and rhythm, pressure and release, inward and outward impulses—can be seen as a template for basic developmental gestures the organism will express lifelong.

When we look for existential meaning in the early development of a human being, we discover it is our first hero's journey, the “most delicate of human operas,” writes ecologist Sandra Steingraber (2001, p. 24 and 17). She observes that “the language of embryology has a heroic, epic resonance”—and why is that? Because it captures the infinitesimal yet monumental processes taking place in the early weeks following conception. It chronicles the inscrutably intricate series of cellular events, with their minute error tolerances in timing, placement, and motion, that result in an embryo. It narrates the statistically implausible journey through which *each of us successfully triumphed!*

Imagine this scene: a miniscule entity wafts its way, jellyfish-like, through the dark fluid sea of a boundless uterine cavity before sidling up to the spongy uterine wall. (Microscopic images of this scene reveal something very much like the landing of a lunar module on the moon.) But

prior to that landing, the glistening, quivering little space explorer spends up to two days suspended in the vast open space of the uterine cavity. Joseph Chilton Pearce noted that this (eight to ten days post-fertilization) is a common point of spontaneous miscarriage, and biodynamic embryologist Michael Shea explains why: this is an important point of choice for the pre-embryo, because it requires a tremendous amount of energy to accomplish its next big task, implantation.

For those who persevered across the myriad such existential points of choice inherent in the journey to embodied life, there can be deep resources to be found within our earliest, most minute demonstrations of our intention to be: echoes of our own heroic embryonic nature from which we may take courage and inspiration, and tap as a vital, healing force at any age—our own existence gestures of “Yes.”

But in the spirit of Frederick Douglass, who wisely noted “It is easier to build strong children than to fix broken men,” I wonder what heights we might reach if we can devote our energies to growth rather than budget them for healing? My wish for our human family is a culture that recognizes the shaping power of early life, and a society in which our future citizens are conceived with intention in love, joy, and *grossesse psychique*!

References

- Abbott, S. W. (2000). When there's no place like home: Heidegger, hermeneutics, and the narratives of adopted adolescents. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 60(9-B), 4871.
- Axness, M., & Evans, J. (2014). Pre- and perinatal influences on female mental health. In D. L. Barnes (Ed.), *Women's Reproductive Mental Health Across the Lifespan*. New York: Springer International.
- Bogdan, R., Nikolova, Y. S., & Pizzagalli, D. A. (2013). Neurogenetics of depression: A focus on reward processing and stress sensitivity. *Neurobiology of Disease*, 52, 12-23.
- Brandon, A. R., Pitts, S., Denton, W. H., Stringer, A., & Evans, H. M. (2009). A history of the theory of prenatal attachment. *Journal of Prenatal & Perinatal Psychology & Health*, 23(4), 201-222.
- Brodzinsky, D. M. (1991). Prevalence of adoptees among special education populations. *Journal of Learning Disabilities*, 27(8), 484-489.
- Buss, C., Entringer, S., & Wadhwa, P. D. (2012). Fetal programming of brain development: Intrauterine stress and susceptibility to psychopathology. *Science Signaling*, 5(245), 1-7.
- Bustan, M. N., & Coker, A. L. (1994). Maternal attitude toward pregnancy and the risk of neonatal death. *American Journal of Public Health*, 84(3), 411-414.

- Condon, J. (1993). The assessment of antenatal emotional attachment: Development of a questionnaire instrument. *Journal of the British Psychological Society*.
- Davis, E. P., Glynn, L. M., Hobel, C., Schetter, C. D., Chicz-DeMet, A., & Sandman, C. A. (2007). Prenatal exposure to maternal depression and cortisol influences infant temperament. *J. Am. Acad. Child and Adoles. Psychiatry*, 46(6), 737-746.
- Denver, R. J. (1999). Evolution of the corticotropin-releasing hormone signaling system and its role in stress-induced phenotypic plasticity. 897, 46-53.
- Doan, H. M., & Zimmerman, A. (2004). Conceptualizing prenatal attachment: Toward a multidimensional view. *Journal of Prenatal and Perinatal Psychology and Health*, 18(2), 109-130.
- Emerson, W. (1993). [Personal communication].
- Emerson, W. (1996). The vulnerable prenat. *Pre- and Perinatal Psychology Journal*, 10(3), 125-142.
- Ferenczi, S. (1929). The unwelcome child and his death instinct. *International Journal of Psychoanalysis*, 10, 125-129.
- Glover, V. (2011). Prenatal stress and the origins of psychopathology: an evolutionary perspective. *Journal of Child Psychology and Psychiatry*, 52(4), 356-363.
- Green, M., Rani, C., Soto-Piña, A., Martinez, P., Frazer, A., Strong, R., & Morilak, D. (2011). Prenatal stress induces long term stress vulnerability, compromising stress response systems in the brain and impairing extinction of conditioned fear after adult stress. *Neuroscience*, 192, 438-451.
- Grizenko, N., Fortier, M.-E., Zadorozny, C., Thakur, G., Schmitz, N., Duval, R., & Joobar, R. (2012). Maternal stress during pregnancy, ADHD symptomatology in children and genotype: Gene-environment interaction. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 21(1), 9-15.
- Grof, S. (1976). *Realms of the Human Unconscious*. New York: Dutton.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, 241, 540-545.
- House, S. (2000). Primal integration therapy--School of Lake: Dr. Frank Lake MB, MRC Psych, DPM (1914-1982). *Journal of Prenatal and Perinatal Psychology and Health*, 14(3-4), 213-235.
- Hrdy, S. B. (1999). *Mother Nature: Maternal Instincts and How They Shape the Human Species*. New York: Ballantine.
- Huizink, A. C., Mulder, E. J., & Buitelaar, J. K. (2004). Prenatal stress and risk for psychopathology: Specific effects or induction of general susceptibility? *Psychological Bulletin*, 130(1), 115-142.
- Insel, T., Kinsley, C., Mann, P., & Bridges, R. (1990). Prenatal stress has long-term effects on brain opiate receptors. *Brain Research*, 511, 93-97.
- Jacobson, B., Eklund, G., Hamberger, L., Linnarsson, D., Sedvall, G., & Valverius, M. (1988). Perinatal origin of eventual self-destructive behavior. *Pre- and Perinatal Psychology Journal*, 2(4), 227-241.
- Kestenberg, J. S., & Browitz, E. (1990). On narcissism and masochism in the fetus and neonate. *Journal of Prenatal and Perinatal Psychology and Health*, 5(1), 87-94.

- Levine, P. (2002, March 2-3). *When biology becomes pathology*. Paper presented at the From Neurons to Neighborhoods: The Effects of Emotional Trauma on the Way We Learn, Feel and Act, Mt. St. Mary's College, Los Angeles.
- Lipton, B. (2002). Nature, nurture and human development. *Journal of Prenatal and Perinatal Psychology and Health*, 16(2), 167-180.
- Lipton, B. (2005). *The Biology of Belief*. Santa Rosa, CA: Mountain of Love/Elite Books.
- Maret, S. (1997). *The Prenatal Person: Frank Lake's Maternal-Fetal Distress Syndrome*. Lanham, MD: University Press of America.
- Maté, G. (2010). *In the Realm of Hungry Ghosts: Close Encounters with Addiction*. Berkeley, CA: North Atlantic Books.
- McCord, W. (1997). *Earthbabies: Ancient Wisdom for Modern Times*. Gilbert, AZ: Self-published.
- McGarey, G. T. (1997). *The Physician Within You: Medicine for the Millennium*. Deerfield Beach, FL: Health Communication.
- Noble, E. (1993). *Primal Connections*. New York: Fireside.
- O'Donnell, K. (2013). Prenatal maternal mood is associated with altered diurnal cortisol in adolescence. *Psychoneuroendocrinology*.
- Pesonen, A.-K., Räikkönen, K., Strandberg, T. E., & Järvenpää, A.-L. (2005). Continuity of maternal stress from the pre- to the postnatal period: associations with infant's positive, negative and overall temperamental reactivity. *Infant Behavior and Development*, 28(1), 36-47.
- Pesso, A. (1990). The effects of pre- and perinatal trauma. *Hakomi Journal*(8).
- Relier, J.-P. (2001). Influence of maternal stress on fetal behavior and brain development. *Biology of the Neonate*, 79(3-4), 168-171.
- Sandman, C., & Yessaian, N. (1986). Persisting subsensitivity of the striatal dopamine system after fetal exposure to beta-endorphin. *Life Sciences*, 39, 1755-1763.
- Schlotz, W., & Phillips, D. (2009). Fetal origins of mental health: Evidence and mechanisms. *Brain, Behavior, and Immunity*, 23, 905-916.
- Share, L. (1994). *If Someone Speaks, It Gets Lighter: Dreams and the Reconstruction of Infant Trauma*. New Jersey: Analytic Press.
- Shelton, D., & Rubin, B. M. (2008, May 6). More mental disorders in adopted youth. *Los Angeles Times*, p. A17.
- Shonkoff, J. P., Garner, A. S., HEALTH, T. C. O. P. A. O. C. A. F., COMMITTEE ON EARLY CHILDHOOD, A. A. D. C., PEDIATRICS, S. O. D. A. B., Siegel, B. S., . . . Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-e246. doi:10.1542/peds.2011-2663
- Sidoli, M. (1989). *The Unfolding Self: Separation and Individuation*. Boston: SIGO Press.
- Slap, G. (2001). Adoption as a risk factor for attempted suicide during adolescence. *Pediatrics*, 108(2), E30.
- Sonne, J. (1997). Magic babies. *Journal of Prenatal and Perinatal Psychology and Health*, 12(2), 61-88.
- Steingraber, S. (2001). *Having Faith: An Ecologist's Journey to Motherhood*. New York: Berkeley.
- Stern, D. N. (1998). *Diary of a Baby*. New York: Basic Books.

- Stratakis, C. A., Gold, P. W., & Chrousos, G. P. (1995). Neuroendocrinology of stress: implications of growth and development. *Hormone Research*, 43, 162-167.
- Tremblay, K. A., & Soliday, E. (2012). Effect of planning, wantedness, and attachment on prenatal anxiety. *Journal of Prenatal & Perinatal Psychology and Health*, 27(2), 97-119.
- Van der Bie, G. (2001). *Embryology: Early development from a phenomenological point of view*. Netherlands: Louis Bolk Institute.
- Verny, T. (2002). *Tomorrow's Baby: The Art and Science of Parenting from Conception through Infancy*. New York: Simon & Schuster.
- Verrier, N. (1993). *The Primal Wound: Understanding the Adopted Child*. Baltimore, MD: Gateway.
- Von Glahn, J. (1998). The pre- and perinatal development of a sense of self. *Journal of Prenatal and Perinatal Psychology and Health*, 13(2), 155-169.
- Wadhwa, P. (2005). Psychoneuroendocrine processes in human pregnancy influence fetal development and health. *Psychoneuroendocrinology*, 30, 724-743.
- Wendling, P. (2006). Mood in pregnancy may impact fetal development. *Ob.Gyn. News*, 41(17), 12.
- Werner, E. A., Myers, M. M., Fifer, W. A., Cheng, B., Fang, Y., Allen, R., & Monk, C. (2007). Prenatal predictors of infant temperament. *Developmental Psychology*, 49(5), 474-484. doi:10.1002/dev.20232
- Whitton, A. E., Treadway, M. T., & Pizzagalli, D. A. (2015). Reward processing dysfunction in major depression, bipolar depression and schizophrenia. *Current Opinion in Psychiatry*, 28(1), 7-12.
- Yim, I., Glynn, L., Dunkel-Schetter, C., Hobel, C., Chicz-DeMet, A., & Sandman, C. (2009). Risk of postpartum depressive symptoms with elevated corticotropin-releasing hormone. *Archives of General Psychiatry*, 66(2).
- Zucchi, F., Yao, Y., Ward, I., Ilnytsky, Y., Olson, D., Benzie, K., . . . Metz, G. (2013). Maternal stress induces epigenetic signatures of psychiatric and neurological diseases in the offspring. *PLoS One*, 8(2), e56967. doi:10.1371/journal.pone.0056967