Evermore Now: Daseinsanalysis and Early Development

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Introductory remarks:

Thank you for inviting me to speak this evening. And also thank you to Maurice Godin, Barry Keehn, Cathleen Hoskins and my mother for helping me form this presentation.

It is a great honor to give the keynote address on the occasion of the 10^{th} anniversary of The Society for Daseinsanalysis in Canada. As an early member of the Daseinsanalysis concentration group offered by Anna Binswanger-Healy, I experienced the pleasure and challenge of delving into this compelling field. After reading Medard Boss and Ludwig Binswanger, it quickly became apparent that if I was to explore the depths of Dasein, I needed to go to the source and carefully read Heidegger's Being and *Time*. Some of the questions that troubled me included: What is the difference between big 'B' and little 'b' Being? What is Dasein? What are the structures of temporality and care? What is the difference between the ontic and ontological levels of existence? How does Befindlichkeit or being in a mood affect Dasein? - so many strange and intriguing questions and so much frustration in the attempt to comprehend the subtleties of this psychotherapeutic/philosophical discipline. As most of you know, a study group quickly emerged from the two concentration groups. A small group of women traveled to Anna and Jim's home or to the island home of Sam Mallin to study Being and Time. I stayed with this wonderful group of thinker-feelers until my husband and I relocated to Los Angeles in 1997. It is now 9 years since we left and yet the years of studying Daseinsanalysis continue to provide support. My tolerance to sit with suffering, confusion, nothingness and despair grew in part from my willingness to sit with Heidegger's writing. But more importantly, it grew from the deeply embedded relational experience that unfolded with Anna, Cathleen, Bev, Kim, Camilla, Sam and me as we laughed and searched for understanding. Once we even shared a bottle of wine as we tried to understand the essay on 'The Thing'. In truth, I have more vivid visceral memories of the relational 'being-with' than the actual words of Heidegger. Even now, when I re-read Heidegger I carry these past memories with me, especially the image of the wine bottle as 'The Thing'.

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And so these past memories as they interface with the 'now' moment of tonight become part of the fabric of this paper. They shaped some of the many questions that arose as I moved deeper into the study of neurobiology, early development and traumatology. It is not that studying Heidegger was inadequate, since whenever you examine Heidegger from a new lens his words help to focus new ponderings and observations. But like my early Daseinsanalysis study, it is my hunger for learning, my curiosity to explore, and my desire to seek new ideas that has helped to shed some light on the human condition. And that desire has propelled me along new paths. Tonight, I look forward to these paths converging. In giving this paper, my ongoing ambivalence with some of Heidegger's thinking will be apparent. For example, his dialectical discourse about the relationship between the ontological and ontic is brilliant and reassuring. As Heidegger states, the ontological 'a priori' structures of Dasein's Being provide the primordial ground for authenticity. That's great but we exist primarily at the individual experiential ontic level. And only ontic Dasein changes. We are 'thrown' into our own unique ontic being-in-time. This statement is an undeniable truth, even if it feels unfair and unjust.

My ambivalence with Heidegger's thinking is partially informed by his personal ontic 'thrownness'. The shadowy reality of his past, including his early growing years during World War I and his decision to join the Nazi party, bring into question his ontic 'thrownness' and how it led him to perceive the deep structures of ontological Dasein. Without question all 'thrown' experiences shape our ontic existence, but do they also color our experience of the ontological structures? And since Dasein is always a beingwith, every being-with and being-with-in-the-world inevitably influences our ontic condition. Given this being-with state, the unsettling reality of Heidegger's past colors my being-with Dasiensanalysis. How much do Heidegger's early developmental experiences inform his thinking? How much does his later thinking function as an active effort to self-soothe and heal his denial system that had to persist during the Nazi regime. Heidegger's own ontic existence on some level influences our study of Dasein. Knowing Heidegger's background from the beginning of my studies of Daseinsanalysis certainly limited my receptiveness and supported my movement away from Daseinsanalysis, even though the discipline of studying philosophy, especially studying it with such an amazing group of women, was a major integrating force in my own development.

Several questions will be addressed in this paper. Do ontological structures of time, space and care remain untouched by our ontic experiences? Does the adult mind and the child's mind share the same experience of the ecstatical 'standing out' when they authentically open themselves to receive the 'unconcealed' ontological structures of Dasein. Even though these answers can be found in Heidegger's writing, they still seem remote and unsatisfying to me. The study of neurobiology, early development and traumatology builds from the foundation of non-linear dynamic theory. In this theory structure and function are not separate. They influence and shape each other. In fact the early embryological formation of the brain is first a functional dynamic that then builds structures and if early insult occurs in this time period, then the brain will have structural and functional damage so severe that the embryo will die. This developmental knowledge underscores tonight's talk. I contend that Dasein is not just an ontic and ontological being but it is also a Developmental ontic and ontological Dasein. Developmental Dasein's unique ontic experiences shape and re-shape all future experiences of being-with-in-theworld and being-in-time. Further, Developmental Dasein experiences the ontological structure of time differently than adult Dasein. And more importantly, Developmental Dasein is the ground that profoundly and irrevocably shapes our ontic existence – it facilitates our emergence into adult Dasein.

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Heidegger wrote: "But the primordial ontological basis for Dasein's existentiality is temporality (p. 277) ... Dasein is always ahead of itself in its Being. Dasein is always 'beyond itself' not as a way of behaving towards other entities which it is not, but as Being towards the potentiality-for-Being which it is itself (p. 236)" (Heidegger, 1962). The ontological basis of Dasein is to exist within time and move towards the potentialityof-Being. In order to exist, we must exist in time. And yet how we perceive ourselves in time is deeply personal and often varied. Heidegger writes that "Dasein stretches between birth and death" (p. 425), that Dasein's very existence occurs within the 'between', between birth and death (p. 427). Beyond the concept that we exist in the 'between', which is a gorgeous image that begs further discussion, Heidegger's use of the active verb 'stretches' equally demands exploration. In order to stretch between, we must exist within a physical body, including a brain. We must inevitably engage in the act of stretching, reaching, moving, intending. And so the primordial condition of being in time is to exist in the 'i-n-g' and not to remain stagnant in the 'Be'. According to the dictionary "ing" means "the act or art of doing the action" (Wagnalls, 1967). And being in time is to exist in the 'i-n-g', something that is only possible when we exist in the movement of our bodies. The 'i-n-g' enables us to actively co-create our be-ing as we temporally engage with others and the world around us. In fact, Heidegger states that 'Being-with is an existential characteristic of Dasein (p. 156)" and so we are always in a state of stretching between birth and death with others and the world. This is the bedrock of Being and Time.

Further, Heidegger adds: "Dasein stretches along between birth and death. The 'connectedness of life', in which Dasein somehow maintains itself constantly, is precisely what we have overlooked in our analysis of Being-a-whole (p. 425)." Elaborating on this concept Heidegger states: "the self maintains itself throughout itself with a certain selfsameness" (p. 425). This stretching, maintaining and connected selfsameness is in fact a developmental achievement that is accomplished by early adulthood. Development is a process of forming a connectedness, of forming Being-in-time. Perceptions of time and self are experienced differently for small infants, toddlers, children and adolescents. And for patients who suffer unresolved trauma and loss, or patients with neurological damage such as dementia, stroke or traumatic head injury, time and a connectedness of self are often severely compromised or lost. This is not just a theoretical, subjective difference; it is literally different connections and disconnections within brain systems. These experience-dependent brain systems actively receive and shape our being-with as we stretch between birth and death. And so one question that arises is whether these different neurological connections occur at both the ontic and the ontological level. Certainly this is part of ontic Dasein but it must also be part of ontological Dasein.

It is an irrefutable fact that small children and adolescents experience themselves in time differently than adults. A newborn, a two-year-old, and even a fifteen-year-old, tend to experience time only as 'now' moments. Inadvertently, in critiquing the common notion of temporality, Heidegger describes development. "Dasein traverses the span of time granted to it between two boundaries, and it does so in such a way that, in each case, it is 'actual' only in the 'now', and hops, as it were, through the sequence of 'nows' of its own 'time'. Thus it is said that Dasein is 'temporal'" (p. 425). For infants, children and adolescents the immediacy of all 'now' moments shape the internal working models of self and self with other. These 'now' experiences neurobiologically construct as well as maintain Developmental Dasein. Dasein is actively hopping through a 'sequence of nows' as it stretches between birth and death. But what is not fully amplified is that the sequence of 'nows' changes with development. Developmental Dasein not only is supported by the ontological structure of time stretching but also is formed by the uneven 'hopping' of maturational ontic 'now' moments.

How the brain processes time is a subject of great interest since this study also points to a neurobiological understanding of consciousness itself (Damasio, 1999; Johnson, 2002; LeDoux, 2002; Llinas, 2001). Again Heidegger writes that "Dasein is always ahead of itself in its Being. Dasein is always 'beyond itself'" (p. 236). Both neurobiology and Heidegger shed light on the fundamental action systems of our body. In order to move we must anticipate where our movements will project and what will result as we move (Llinas, 2001). Even fetuses implicitly know that they can reach towards the umbilical cord to touch it or find their thumb or fist to suck (Thomson, 2004). Fetuses have a motoric sense of intentional expectations, with future expectations embedded and impelling these action patterns. Newborns implicitly 'know' that social signals of crying should activate caregivers' attention (Porges, 2004). Movement actions inherently hold an intentionality that is based on an active present that holds and anticipates a future outcome (Llinas, 2001; van der Kolk, 2006). This is the 'Being towards' that Heidegger speaks about and it is deeply embedded in our primordial neurobiological temporal existence. Even the most severely brain damaged patients hold this embodied existential temporality. Our physiological systems respond with a series of actions in an effort to maintain homeostasis. For example, our brainstem allows our heart to beat, our respiration to fluctuate in tandem with our heart, and our body temperature to shift as we attempt to regulate our internal systems in response to our internal and external environments. We have a deep sense of being 'always ahead' as we 'hop' and 'stretch' in the now moments. Does Heidegger view this fundamental physiological temporality as part of ontological Dasein, or is it on the ontic level? Certainly our physiological primordial need to always be ahead is critical for survival – it is the 'i-n-g' of Being.

Heidegger also describes Dasein's sense of temporality more complexly than hopping through a sequence of 'nows'. He states;

"The horizon for the retaining which expresses itself in the 'on that former occasion' is the earlier; the horizon for the 'then' is the 'later on' (that which is to come'); the horizon for the 'now' is the 'today'. Every 'then', however, is, as such, a 'then', when ...'; every 'on that former occasion' is an 'on that former occasion, when ...'; every 'now' is a 'now that ...'. The 'now', the 'then' and the 'on that former occasion' thus have a seemingly obvious relational structure which we call 'datability'. Whether the dating is factically done with respect to a 'date' on the calendar, must still be completely disregarded. Even without 'dates' of this sort the 'now', the 'then' and the 'on that former occasion' have been dated more or less definitely. And even if dating is not made definite, this does not mean that the structure of datability is missing or that it is just a matter of chance. Incontestably, the 'now that ...', the then, when ...' and the 'on that former occasion' are things that we understand. And we also understand in a certain way that these are all connected with 'time'" (P. 459).

The mere fact that he uses 'horizon' implies both a limit and a beyond. With this elaboration of temporality, Heidegger begins to generalize. Dasein has a fundamental ontic and ontological understanding of time. However, the ontic understanding that an extended future and past actually exist only forms as we build an extended autobiographical sense of our self. And the full awareness of an extended autobiographical self only emerges developmentally in early adulthood (Damasio, 1999; Parvizi, 2001).

Simple cognitive time constructs, such as tomorrow and yesterday, are meaningless to infants and toddlers. Their dorsal lateral and medial prefrontal cortices, regions located just behind the forehead that hold a sense of self, time and serve as an executive planning system, have not myelinated. And without myelination, rapid neural connecting circuits cannot form in these regions (Fellows, 2005; Freeman, 2000; Ivry, 2004; Schore, 2003). It would be great to tell small babies that you will feed them in a few minutes - that you are just finishing off a task and will then attend to their needs. Unfortunately for babies, without these frontal regions operating, they are left in a series of never-ending now moments of distress; however, they can equally exist in neverending moments of pleasure, contentment and ease. It is these never-ending 'now' moments that become the experience-dependent attachment formations, the being-with experiences that will shape a child's sense of self and the world as reliable, secure and coherent, or as unreliable, insecure and incoherent. The earliest rudimentary formation of the 'constantly maintained self' is neurobiologically built from the child's 'now' experiences of 'being-with'. Dasein is temporal and exists in the between. But as it 'stretches', it is also formed, especially during the critical hopping 'now' moments of Developmental Dasein.

Development is a process of emergence that is inextricably linked to the emergent properties from which it emerges. This dynamic systems theory echoes the same concept that Heidegger articulated when he described Dasein as ontico-ontological. The ontological structures such as time, space, care, mood and being-with must co-exist with the daily living of ontic Dasein. These are also the emergent properties of development. They directly interact; both shaping and being shaped by the internal and external world of Dasein. For example, pregnant women who are chronically stressed directly influence the formation of their fetuses. Stress will provoke a proliferation of oxytocin receptors within the ventral medial nucleus of the hypothalamus and this region will orchestrate the timing and behavior of the offspring's maturation and caregiving behaviors. These offspring will reach puberty earlier than their counterparts whose non-stressed prenatal environments evoke oxytocin receptor formation in the medial preoptic region of the hypothalamus. The prenatally stressed offspring will find pleasure mating with multiple partners, will bear offspring sooner and more frequently, and yet will have no interest in caregiving their offspring (Cameron, 2005). Why would this happen? It is Nature's way of ensuring survival of the species because chronic stress compromises development and inevitably leads to increased mortality and morbidity. For these offspring, Being-in-time is a very different experience than for the offspring with oxytocin receptors in the preoptic nucleus of the hypothalamus who mature later, live longer, have fewer offspring, and show strong interest in caregiving and maintaining stable long-term relationships. Dasein's stretching between birth and death is different for these offspring, and with this difference comes a different experience of moving towards 'the potentiality-for-being'.

From the moment of conception through early childhood, the developing neurobiological systems are vulnerable to alterations. A proliferation of oxytocin receptors in the ventral medial rather than a proliferation in the medial preoptic nuclei of the hypothalamus, seemingly a minor alteration, directly changes the amount of stretching between birth and death, and the quality of our existence as we stretch.

Further, the actual ability to experience a stable self in time is not always present. It slowly emerges as we develop. Even comprehension of gender and species stability slowly emerges (Newman, 2005). For example, when my younger brother was three years of age he had a vague sense that the future existed because he knew he would one day be an adult. But this didn't stop him from declaring that he would grow up and 'be' a truck. When he was five and had a burgeoning sense of gender stability, he decided that he would be a boy truck. Only later did he acquiesce to entertaining the notion that he would drive the truck, and with this compromise came the understanding that past and future do expand with a sameness of self.

This developmental achievement isn't complete until early adulthood. And with this sameness of self comes the fullness of an autobiographical self, with an extended past and future. Do we regard my young brother from the vantage of the adult mind and ascribe a sameness of self in time to him, or do we view Being-in-time from the perspective of the being that is emerging in time? The being of the child, at every developmental stage, can certainly be regarded as different. Only with the completion of development do we truly 'understand in a certain way' that past, present and future are all connected with time. The temporality structure, once matured, allows us to maintain a unity of self.

As stated, one of the two major critical periods of development occurs between conception through to the completion of toddlerhood. The second critical period is adolescence, a time when massive brain re-sculpting in the prefrontal cortex takes place. In fact, "it is estimated that as many as 30,000 synapses may be lost per second over the entire cortex during the pubertal/adolescent period ... leading to an ultimate loss of almost one-half of the average number of synapses per cortical neuron that was evident in the preadolescent period ... it is speculated that such pruning is an example of developmental plasticity whereby the brain is ontogenetically sculpted on the basis of experience to effectively accommodate environmental needs" (Spear, 2000, p.439). It is also a very good argument for keeping important decisions out of the hands of teens. During this period of neurobiological re-construction, adolescents are unable to maintain clear executive planning, even though they are able to comprehend the complexity of abstract thought. Without the hierarchical regulation of the prefrontal cortex, adolescents are biased towards appraising events from more emotionally driven subcortical limbic processes. In adolescence the amygdala, with its primary function of detecting threat, including social threat, is operating without the modulating force of higher cortical functioning appraisal systems, and so teens experience events more intensely and more negatively (Monk, 2003; Spear, 2000). Lacking full engagement of the dorsal lateral and medial prefrontal cortices, like their younger counterparts, time is once again a series of intense 'now' moments that seemingly persist forever, while the sameness of self is again unstable. When adolescents tell us that it hurts and we don't understand how terrible it is, they are correct. Adult brains appraise events with greater prefrontal cortical engagement

and this dampens the subcortical limbic responses, making the emotional intensity much less.

Adolescents also have reduced dopamine and serotonin levels, a major contributing factor that drives them to seek high risk-taking activities (Shirtcliff, 2005; Spear, 2000). Why does nature inflict this neurobiological alteration on adolescents? Fundamentally this is a time period when adolescents must learn through new experience-dependent activation. This risk-taking prepares them for entrance into the adult world. They need to move away from home, separate from family, and actively form an independent identity of self and self with other. In this period of development early background attachment formations serve as a buffer only for those adolescents who experienced secure attachments (Sroufe, 2005). For the insecurely attached teens, the period of 'storm and 'stress' will be amplified (Rholes, 2004). Neurobiological resculpting is developmentally directed and shaped by early experiences, both good and bad (Gogate, 2001).

What is impressive about the findings of neurobiology is that it validates the experience of children and teens. Not only do they experience themselves in time differently than adults, but they are also more vulnerable to negative experience. In fact, in development the earlier the insult the more pronounced the injury. For example, a newborn baby is more vulnerable to emotional and physical neglect and abuse than a toddler, a five-year-old and so on (K. Lyons-Ruth, Jacobvitz, Deborah, 1999). As maturation progresses, the neurobiological systems gain more tolerance to withstand insults. That Dasein exists in a series of 'now' moments is accurate neurobiologically. But what occurs as we hop along this sequence of 'now' moments that stretch between birth and death are not a sequence of equally valued 'nows'. The two critical periods of development, early childhood and adolescence, are uneven periods in which the developing Dasein is profoundly vulnerable to psychoneurobiological damage. Being-intime is not a linear progression of 'potentiality-for being', but is rather interrupted bursts of profound change that irrevocably alter our 'potentiality-for being'. In these periods, extended past and present that contain the sameness of self become prolonged 'nows' with shifting neurobiological connections of self. "The specific movement in which Dasein is stretched along and stretches itself along, (p. 427)" Heidegger calls, "*'historizing*" (Heidegger, 1962). For Developmental Dasein, 'historizing' may in fact occur not only at the experience-dependent ontic level, but may also include and modify ontological experiences.

Lastly, Heidegger writes: "Fear disclosed Dasein predominantly in a privative way. It bewilders us and makes us 'lose our heads'. Fear closes off our endangered Being-in, and yet at the same time lets us see it, so that when the fear has subsided, Dasein must first find its way about again" (Heidegger, 1962) p. 181. The problem with overwhelming fear and trauma during Developmental Dasein is that fear doesn't fully subside and Dasein doesn't fully find its way. For traumatized patients, unresolved trauma and loss fundamentally rupture Being-in-time. When the unbidden memories of trauma revisit, time is perceived simultaneously as a past that has no end and a future that has no existence (Stolorow, 2003; van der Kolk, 2006). For many patients, the only solution to end the painful experience of being stuck in distorted temporality is to perceptually erase the 'i-n-g' of being-with. A feeling of connectedness and sameness of self is lost; an experience of having a body is dissociated from awareness. Suffering in unending pain is numbed by elevated levels of endogenous opioids, and many selfreferencing regions in the brain such as the ventral medial prefrontal cortex operate at low levels or are completely shut off (van der Kolk, 2003). Traumatized patients subjective feelings of disembodied nothingness or blackness are reflected in the dark spaces of their brain scans.

Many exist in isolated speechless terror because Broca's area and the hippocampal regions are silenced by heightened levels of stress hormones (Bremner, 2002; van der Kolk, 2003). With these regions non-operational, pain and threat detecting areas such as the amygdala and insula are unchecked and unmodulated – they send intense signals of terror, disgust and rage that seem unending (van der Kolk, 2006). Worse, the mobilization of the defensive action systems of fight or flight are never completed – the memory of being unable to protect themselves from threat keeps these patients suspended in time (Levine, 1997). The question then becomes in which time are they suspended? The attachment system, normally engaged to ensure protection from threat, is inadequate at best, and at worse, the attachment figures are/were the source of threat (K. Lyons-Ruth, 2002). For traumatized Dasein, unresolved memories replay over and over again. The potentiality-for being is arrested; it is a series of ongoing 'thennows'. Like Sisyphus who was eternally condemned to repeatedly push a rock up a hill and then watch it roll down (Camus, 1955), traumatized patients are aware that they are trapped in the painful repetition of their past trauma. They comprehend that they are excluded from the experiences of a unity of self that can exist in temporality.

Traumatized Dasein has an almost phobic-like response to experiencing a new present 'now' that demands a physical embodied engagement of 'i-n-g-ing'. To be embodied and actively stretch or hop through the between of birth and death means you encounter a future that comes towards you and one that you stretch towards, but this means you must be embodied. For traumatized patients, only the old and familiar past memories, unconsciously projected into the future, move towards them and repeatedly re-traumatize them. Walter Benjamin unknowingly described traumatized patients' experience of time in his theses on the philosophy of history. He states:

"This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But the storm is blowing from Paradise, it has got caught in his wings with such a violence that the angel can no longer close them. The storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward"

(Forche, 2006).

For traumatized patients their horizon of ontic stretching between birth and death is foreshortened. Their experience of stretching will be changed forever. The active ability to engage in the embodied 'i-n-g' is compromised as the force of the unresolved past pushes them into a disconnection from self and others. The primordial experience of unity provided by temporality is lost.

In closing, ontological structures do prevail during development. Simultaneously our ontic genetic-directive is to stretch between conception and death. We develop within a precise time-frame that is deeply encoded in our genes; however, our genetic inheritance is also modified by experience. During development a dynamic interaction between genes and gene expression forms the adult we will become. During this developmental journey, ontic Dasein is formed. Finally, we return to the opening question that still remains unanswered. Do the ontological structures remain pristine constructs or are they also formed and modified by development? Are they like Jungian archetypes that are formless and are only given shape at the ontic personal level (Jung, 1959)? Certainly, in open dynamic systems such as the universe and the brain, structure and function co-exist and interactively influence and shape each other (Lewis, 2000; Thelen, 1998). Neither remains untouched in a pristine potentiality since both are essential properties for dynamic existence and dynamic development.

Heidegger's teachings are powerful and grounding - they compliment today's major neuroscientific and psychological findings. Responding to these teachings may provide greater understanding about our vulnerable children, adolescents and traumatized patients. When we incorporate the 'being-with' of early development, including the indelible events of early maltreatment, our understanding of Heidegger's temporality is expanded. Developmental Dasein's experience is not the same as adult Dasein's Being-in-time. Developmental Dasein is a dynamic unfolding and it is vulnerable. When early trauma impinges on the 'potentiality-for-becoming', Developmental Dasein is irrevocably changed. Further, Developmental Dasein raised in optimal conditions is still unable to 'maintain itself constantly'. Its temporality of stretching between birth and death is an uneven stretching. Dasein is first a Developmental Dasein. And Developmental Dasein will continually influence our ontic and quite possibly our ontological experience of Being and time.

Thank you. I will now call upon Cathleen to offer a response to this paper.

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