

THE IMPORTANCE OF SOCIAL BASELINE THEORY FOR THE TREATMENT OF BPD.

INTRODUCTION. Emotional dysregulation is for many at the heart of BPD: this has been emphasized by the launch, in 2014, of a specialist journal devoted to ED and Borderline Personality Disorder. Unfortunately, not many experts seem to have noticed that such dysregulation is also at the heart of very many other so-called mental illnesses, a fact that calls into question the validity of BPD as a discrete category.

Suffering, illness and psychological distress are not simply individual matters: community has traditionally been a necessary condition for health, as instanced by the debilitating condition of acedia, a somatico-spiritual lassitude which afflicted the early monks and ascetics who lived a solitary life. (1)

Expressing dissatisfaction that research had focussed largely on single areas of dysfunction, James Coan et al. at U. Virginia examined the literature on fronto-limbic dysfunction in BPD, carrying out a number of studies which invite us to transcend such a limitation by considering it within the context of Social Baseline Theory, which proposes that healthy human functioning is dependent upon adequate social support and that, at baseline, biological systems are adapted to operate interdependently rather than independently. Such an approach takes the spotlight off individuals, concentrating instead on their emotional and social support. In contrast to the hubristic individualism of Western medicine, their approach is more in line with the perspective of traditional societies that assume individual illness to be a community matter. We now know, however, from a number of Western studies, that it's the strength of community support networks that may well be even more important in healing than any other single factor. As early as the 40s, for example, a British psychiatrist found a high correlation between atherosclerosis and the social/relational situation of bereaved people. A famous 1967 BMJ article on the fatal effects of bereavement found a sevenfold death-risk increase in the first year among close family members of the bereaved as against a control group: a percussive reminder of the crucial part played by relationships in the maintenance not only of health, but of life itself. (2) Another study of older women showed a huge multiplication of cardiac events in the six months following the

death of a partner. Another very significant finding is that an auto-immune illness like multiple sclerosis has increased dramatically among Canadian women over the last 70 years: then it was parity, now for every man thus afflicted, there are 3-4 female victims. Genetics cannot explain this, but sociology and epigenetics probably can: women nowadays very often have to not only work outside the home but take a disproportionate share of parenting, homebuilding and emotional processing, in a context which no longer offers traditional supports: far more stress than in the 40s, infinitely less material, social and emotional sustenance. And an Australian study showed that women who were isolated AND stressed were nine times more likely to develop breast cancer than those who were either distressed OR isolated. In other words, their social support could regulate the stress and strengthen their immune systems. Other research shows that in elderly couples the hospitalization of one spouse is most likely to lead soon to the hospitalization of the other. And in Darian Leader's brilliant book *Why Do People Get Ill?* he cites numerous studies showing that even in the aetiology of cancer, relational issues, such as closeness to primary carers (PCs), were as significant as a history of smoking. (Note also the extra survival time won by those who engage in post-op support groups.) (3)

Now the issue of closeness to the PC forces us to sharpen our focus on a little matter that embarrasses traditional therapy: the body and its key role in the pre-linguistic, antiphonal play between infant and PC, which has been so subtly studied by Colwyn Trevarthen. In the spirit of Winnicott, Leader insists that the way a primary carer validates the infant body is crucial to our very existence as relational persons: deep Winnicottian holding, touching and Trevarthen's quasi-musical proto-conversations are the begetters and guarantors of safety, meaning, attachment styles and bodily ease in the growing child. For him, the value accorded early on to the infant's body transmits a crucial message: "Life is worth living and I want you to live!"(P.245.) To this I would add, given the prevalence of shame and dissociation from the body in abuse victims: "Your body is precious, enjoy it fully FOR YOURSELF AND OTHERS WORTHY OF ENJOYING IT WITH YOU, AND DON'T LET ANYBODY TELL YOU THAT YOU SHOULDN'T." I believe that it is important to integrate such somatic perspectives into BPD therapy since early trauma and toxic or

unattuned attachment experience frequently engenders radical dissociation from the body among patients later diagnosed as BPs: some studies have noted that those with such attachment histories become intellectually precocious in a last-ditch attempt to gain the love (or protection?) of the PC. Healing, after all, is about wholeness, about mind/body/spirit integration, hence my first paper read to BIGSPD, Dance Therapy and Healing Embodied Dissonance in BPD, in which I discussed the great potential of Nietzschean thought and Schott-Billman's dance therapy for borderline patients. I'd like to suggest here that Nietzsche's various reflections on dance should be prescribed reading for all therapists, especially those dealing with BPD! (4) His ideal god was a god who heals fragmentation, bringing back wholeness and holiness; a god with the greatest, divine qualities, especially the gift of dance, in which mind, body and spirit are one. A god with the power to transform into lightness, flow and elegance what is most heavy, burdensome and difficult.

Traditional societies have valuable lessons to teach us about the importance of community to healing: in Africa, the medical anthropologist Michael Singleton learned this early on in his career. One day, he was called to see a girl in great abdominal pain. After the usual Western tests, he concluded that it was constipation. Later, a local healer came, simply looked at the girl and agreed. However, since he had spent hours discussing the overall social situation with friends and neighbours, finding that there in the village there was a problem of contested inheritance, the threat of drought and a group of immigrants endangering local peace, he opined that all of these tensions could well have been introjected into the child's body and been held there, festering, just as it often does for modern women required to hold the increasing stress and emotional pain of their alpha males. He gave her his remedies, arguing that if her illness were benign, they'd cure her, but if they didn't, they should call him again and he'd get to work on the wider social conflicts and point the finger at the culprits. To that healer, it was inconceivable that any illness, physical or psychological, could be seen outside the context of toxic relationships within a family or social group: the research and practice of Bruce Alexander and Gabor Maté, based on a similar perspective, might be well worth taking on board when reflecting on BPD, since a high level of impulsivity and substance abuse has often been found in BP patients. For Maté, and for Adverse Child Experiences researchers, addiction is highly correlated with abuse

and attachment deficits; for Alexander, addiction is spawned by an impoverished range of life options, colonization, dislocation, deracination, radical isolation, loneliness, and the collapse of communal meanings generated by globalization. To this list I would add family breakdown and disarray; and, perhaps most importantly, the fact that our increasing addiction to frenetic consumption itself makes mass addiction inevitable, so that we HAVE TO declare war on and moralize about addicts, especially drug abusers, making them the scapegoats for our own unaddressed dependence on a dazzling array of addictions; our drug equivalents.

Let me digress briefly here to open up another perspective which dovetails nicely with those of Alexander, Coan and Maté: some years ago, when examining hundreds of depression narratives, I was astonished to find how crucial to healing were Faith, Hope and Caritas (Love), the old-fashioned Theological Virtues which enabled individuals and families in traditional cultures to flourish in a secure, integrated society. Thus, since individual distress, confusion and "mental illness" occur in a network of social contexts, we need to seek new, creative ways to transcend our reliance on individual therapy by recruiting family and community interventions that promote safety, belonging, compassion, dialogue and understanding. Traditional mental health services pay mere lip service to family and community, yet, when it comes to the actual earmarking of financial resources, governments massively fund organizations like the very well-meaning NHS which heavily privileges individual diagnosis and its accomplice, medication, costing billions. This lets them off the hook of confronting the MEANING of a so-called mental illness, the relational environment and the socio-economic context subtending, and often causing it, especially homelessness, poverty and economic inequality. (We might remind ourselves here of Richard Warner's correlation of serious economic recession with rates of mental illness; and of a recent Bristol U. study which found that the economic recession of 2008 – 2010 was followed by increases in rates of suicide, suicide attempts, and mental illness. The recent explosion of suicide and alcoholism in Greece tragically underlines this point.)

"MENTAL ILLNESS", THEN, IS NOT AN ALIEN TO BE VANQUISHED: IT'S A SCREEN ENEMY. If we decide that mental distress is a meaningless "mental illness", an alien invader, we are ignoring,

banishing or shooting the messenger. Messengers, like most of us, can get very angry and violent if we don't really listen to them. They are then likely to protest more and more stridently, in the form of virulent mental or physical pain, disturbance or death. Biomedical psychiatry specializes in messenger assassination and symptom-focussed polypharmacy that attempts to postpone, but usually hastens, the advent of the evil day: Peter Breggin's recent book on psychotropic drug withdrawal is a terrifying testimony to this.

Let us now consider this simple question: why do apparently rational human beings, psychiatrists, continue to prescribe dangerous, usually useless psychotropic drugs to a patient whose "mental illness" is a perfectly rational, coherent and meaningful response to impossible living conditions? Where lies the delusional thinking? If, for example, you are homeless, very lonely, isolated, depressed, overwhelmed by chronic caring duties or anxiety, this does not mean you have a mental illness, since these are perfectly reasonable AND MEANINGFUL responses to familial double binds or intolerable life circumstances. Try to imagine, for example, that you're a single urban mother living in one room with four kids: how on earth would you NOT be severely depressed and hopeless? If you are not, then you are severely dissociated, to the point of being cuckoo.

Let me make one concrete suggestion here: government should make a serious critical examination of the huge public funds allocated to usually dangerous, usually useless and addictive psychotropic drugs WHICH AVOID THE FUNDAMENTALS, WHILE GIVING THE APPEARANCE OF DOING SOMETHING. Is it not truly shameful and scandalous that in the UK over 80% of BP patients are on anti-depressants and that some BPD specialists should still be arguing for the utility and relative safety of benzodiazepines in BPD treatment? Despite our economic upturn, such biomedical options have not only wasted myriad millions of public money, but have completely sidelined quality of life, spawning many, many thousands of anxious, emotionally-numbed, lonely, dispirited people, deprived of hope and agency. I'd argue that a planned withdrawal from such a policy and redirection of the monies thus saved into the construction of real organic communities and real community projects should become an urgent priority.

THE SOCIAL REGULATION OF NEURAL THREAT RESPONSES. Hughes, Crowell, Uyeji and Coan have made a seminal contribution to the debate on emotional regulation, which is so profoundly compromised in BPD. (5) The SBT perspective is particularly apposite for the treatment of BPD because the impulsive and emotionally dysregulated behaviours common among those diagnosed with BPD occur almost invariably within close interpersonal relationships, which are serially disturbed in such patients, even though their demand for love is relentless enough for some specialists to call them love junkies, bound on a wheel of addiction, always hoping, always disappointed.

We know from many studies that positive social contact exerts a significant nourishing impact on health and well-being, enhancing immune functioning, minimizing salivary cortisol responses, etc. (6) Such support provides the safety required for new learning and the escape from the maladaptive reptilian paralysis of the repetition compulsion. And, at the neuro-physiological level, as Stephen Porges has so brilliantly demonstrated, a neuroception of safety is essential before we can recruit the Integrated Social Engagement System required for a full, relational, aesthetic, and even moral, life. His work provides a beautiful pendant to that of Coan et al., for whom social contact promotes enhanced health and well-being, the neural response to threat being socially regulated. And since auto-regulation is metabolically far too costly, we need, and are hardwired for, the social regulation of our emotional responses in the face of various life stressors: many mammals, for example, regulate emotion through social contact and proximity.

As I mentioned earlier, Darian Leader, too, insists on the importance of community and close relationships for well-being, even for physical well-being, pointing to the fact that loss, closeness to parents and an inability to express emotions to them, especially anger, grief and rage, which are so prevalent in BPD, drain the resources of the immune system, and make the victims hugely prone to multiple mental and physical illnesses, not to mention suicide and early death. The costs of cortical self-regulation are indeed great, so it's not surprising that chronic over-control of hostile feelings would have toxic effects on the psyche, body and relationships: a powerful example of this may be found in Marie Cardinal's account of how her cancer dissolved thanks to a long psychoanalysis that helped her

process her rage against her mother, then forgive her. As many specialists have pointed out, auto-regulation is draining, for we are not hard-wired to regulate our emotions alone: natural killer cells and immune function are greatly reduced among the depressed, the isolated and those living with the toxic effects of chronic interpersonal stress. (3)

CO-REGULATION AND BELONGING IN INFANCY. Humans are not ready for survival at birth: we are desperately dependent for many years if we are to survive, develop and thrive. “There is no such thing as an infant”, as Winnicott famously said, meaning that whenever one finds an infant one finds maternal care, without which there would be no infant, since it cannot survive without another’s love, care and support, and is thus hard-wired for proximity to the PC, regardless of the cost to its health and sanity. And even though, as in Maslow, the infant’s primary needs are physiological, followed by the need for love and safety, the need to belong then comes to the fore, as Colwyn Trevarthen has shown so impressively in his work with infants. He is in no doubt but that infants are centrally focussed on belonging – to a family and to a wider culture. It is no coincidence that much earlier Maslow had designated belonging as a fundamental element in his hierarchy of primary needs. And crucial to belonging, once the infant’s primary physiological needs are being met, is social affect regulation, especially playful, quasi-musical co-regulation with the PC. Within an SBT framework, adult caregivers attend to these needs, and to often chaotic hyper-arousal, by lending their small children cortical, prefrontal effort ON A REGULAR BASIS, so that the world is seen as a safe, dependable place, where trust and positive internal working models of relationship may be fostered. If a child is incapable of self-regulation at a frightening film, for example, its parent can modulate amygdala hyperactivity, soothing and protecting it by, say, holding its hand, thus doing the regulatory work by reminding it that the action in the film isn’t actually real. The infant, after all, is a cauldron of hyper-arousal which needs a constant flow of appropriate and soothing responses to its terrifying survival, and then developmental needs, otherwise it will give up hope, withdraw inwards and try to self-regulate by going into a potentially fatal tonic immobility; a reptilian freeze that inhibits new learning of any sort and guarantees entrapment in repeated maladaptive scenarios, and submission to the Same Old Story. For such an infant, then, in the absence of close relationships and strong social supports, self-

regulation becomes virtually impossible; and well-nigh impossible, too, for adults without recourse to addiction, “madness” or the body’s protest registered by serious physical illness, depleted immune function and relatively early death. And as we know, chronic non-validation of a child’s body-self wreaks havoc on its attachment behaviour, issuing very often in BPD, forcing body therapists to titrate very carefully when doing somatic awareness work, since the risk of re-traumatization is so great here.

HAND-HOLDING AND NEURAL ACTIVATION UNDER STRESS. For many years now, James Coan’s lab has been systematically exploring social affect regulation, using fMRI. In a 2006 study, they collected functional brain images from 16 married women, selected for their high marital satisfaction, who were placed under the threat of mild shock during each of three conditions: holding the hand of their partner, holding that of a male stranger, or lying alone in the scanner. Relationship quality was measured by Spanier’s Dyadic Adjustment Scale.(7) Their focus was on the subjective experience of displeasure and arousal during these tasks, and on any modulations of the brain’s threat response as a result of hand-holding. Self-reported displeasure was found to be lowest during partner hand-holding, relative to either stranger hand-holding or no hand-holding, while both stranger and relational partner hand-holding reduced subjective arousal relative to the alone condition.

Results indicated a pervasive attenuation of the activation in neural systems supporting emotional and behavioural threat responses when the women held their husband's hand. A more limited attenuation of activation in these systems occurred when they held the hand of the stranger, but the brain was highly active when threats were faced alone. Most strikingly, the effects of spouse hand-holding on neural threat responses varied as a function of relationship quality, with higher quality predicting less threat-related neural activation in the right anterior insula, superior frontal gyrus, and hypothalamus during hand-holding by their husband but not by a stranger. Specifically, regions of the brain involved in the modulation of arousal and bodily preparation for action, such as the ventral anterior cingulate cortex, posterior cingulate cortex, postcentral gyrus, and supramarginal gyrus, were all less responsive to threat cues during ANY hand-holding. But partner hand-holding also attenuated threat-responding in the dorsolateral prefrontal cortex,

superior colliculus, caudate and nucleus accumbens, all regions associated with threat vigilance and self-regulation. They also found much lower threat responses in brain regions critical to the state and regulation of the body in response to stress, such as the right anterior insula, the left superior frontal gyrus, and the hypothalamus when subjects hands were held by a partner, but not by anyone else.

Such an experiment seems to buttress my earlier point that trust and faith are very important to healing, so even BELIEVING we can call on support reduces threat responses in the brain, though these are even less active when we are actually strengthened by social support (load-sharing), this being largely a function of familiarity, interdependence, and interpersonal conditioning – and, I would add, love! If, for example, an individual is confronted with a plethora of problems to be dealt with at once, then s/he might be overwhelmed at having to solve so many problems unaided. If a stranger is present, it may be that at least some of the load can be shared, thus reducing cortical stress and anxiety levels. And if the social resource is familiar and predictable, hope and faith in one's capacities are likely to increase, and the cluster of problems is likely to seem far more manageable. And if the helper is a highly loved and trusted partner in a high-quality relationship, then the tasks start to look well within the person's competence.

THE BRAIN IS SOCIAL. Now all of this should come as no surprise, since we have known for a long time that the brain is social: for example, new learning in birds and humans is greatly enhanced when the teacher is another bird or human and is not simply technological. Music therapist, Prof. Jos De Backer of Leuven, a specialist in psychosis and personality disorders, gives us a striking example of this in his psychotic patient playing the piano who suddenly began relating to him when accompanied by Backer. (See, also, the research on Baby Mozart, Einstein, etc., which found that the crucial element in new learning was not attractive, stimulating technology, but a caring, ideally loving, human presence.)

DYSREGULATION AND FRONTO-LIMBIC CIRCUITRY. Theoretical and empirical research on BPD has linked poor emotion regulation abilities with dysfunctional F-LC, but associations are not causes, so we have to take account here of the deleterious effects on the brain of disturbed interpersonal relationships, early trauma, abuse

and abandonment. In this regard, Coan, Hughes et al. have gone a lot further than earlier researchers on BPD F-L dysfunction, proposing that healthy human functioning is dependent upon adequate social support and that, at baseline, biological systems are adapted to operate interdependently rather than independently. The importance of social support systems has, of course, been increasingly recognized in the maintenance of both mental and physical health, but they have given us the scientific basis for that here.

TOUCH AND LOVE, THE BUGBEARS OF THERAPY. Taken together, their findings provide strong evidence that most threat-responsive brain areas are less active when we experience physical contact with another person, thus raising, implicitly, the great potential of touch – the hot potato of traditional therapy. The effect is, of course, larger and more widespread when that other person is a relational partner, and it is larger still among individuals in the highest quality relationships.

METABOLIC ENERGY, REGULATORY COSTS, PSYCHIC ECONOMY. At the University of Virginia, Dennis Proffitt's research in perceptual psychology shows clearly that visual perception is not solely a visual process: when we assess distances, for example, what we see is modulated by our body states, as well as by our emotions: physically fit people see hills as appearing less steep than do unfit or fatigued people, and to tennis players the ball appears bigger when they are confident and striking it well. His studies reveal that distance perception is a complex process in which people's behavioural goals, as well as their emotions and physiological states, affect how far away things appear. For him, what he calls the "embodiment of perception" has thus played an adaptive role in human evolution by helping us make wise, economic cost/benefit judgments. Because emotional and energetic factors affect distance perception, the visual-perception system may be seen as adaptive, since visual perception promotes survival by making people aware of both the opportunities and the costs associated with action. (8) Studies conducted in Proffitt's laboratory have shown that the amount of effort required to walk to a destination or throw an object to a specific target affects how far away the destination or target is perceived to be. Similarly, a person throwing a heavy object will perceive the target to be farther away than a person throwing a light object. This finding also extends to the perceived slant of a hill: a

person wearing a heavy backpack will view a hill as steeper than will someone who is unencumbered. So, for our purposes, if we read this metaphorically we could argue that a person condemned to auto-regulation, due to fear, inadequate social support or crippling trust deficits, is likely to magnify any stressor, with dire physical, metabolic and psychological results.

Drawing on Proffitt, Coan et al. point out that metabolic resources devoted to attention and self-regulation are conserved through social proximity and interaction: at both the experiential and neural levels, regulatory work can demand great effort and can be potentially exhausting, even dangerous, for children and patients, as, indeed, it can be for therapists, who may well be required to draw too heavily on their own prefrontal resources to process, watch over and calm their charges' autonomic arousal states or respond to them with soothing alternative interpretations of a frightening situation. This is so because if social proximity is the baseline human situation, then less effort should be needed in terms of vigilance for potential threats and emotion regulation when we are actually in close proximity to individuals with whom we share familiarity, interdependence and trust, which is in such short supply among BPs due to a history of neglect, abuse or non-validation by a PC. Little wonder, then, that, a history of serial disturbed relationships is a prime marker of borderline pathology.

Now, when it comes to emotion regulation in particular, our efforts may be normally delegated to intimates who decrease our need for constant vigilance and regulatory effort, either by obviating the need for an affective response altogether or by engaging in regulatory behaviour for us (e.g., by noticing our discomfort and holding our hand), effectively lending us prefrontal cortex processing. This allows us to achieve regulatory benefits at a greatly reduced cost, strengthening the immune system and the sense of an empowered self, capable of living the full life we are called to live.(9)

Coan et al., then, conclude that human beings, with their large and powerful prefrontal cortices, possess great attention and self-regulation capabilities, but that sustained activation of these prefrontal capabilities is exhausting, and probably metabolically costly, in ways that are only beginning to be understood. This is particularly important when it comes to therapy with borderline

patients whose trust levels tend to be very low and whose alarm systems are often on permanent alert. In times of surprise or sudden crisis, we all need to be vigilant and protect our safety or integrity, but this is likely to be too damaging over time: longer-term demands are likely to result in damage, and steadily diminishing returns. This may well account for the sudden, apparently random freezing or explosions of fear-generated rage among borderline patients. Social contact and proximity appear to deflect this potential problem by attenuating the need for self-initiated attention and regulation.

CONCLUSIONS AND IMPLICATIONS. An SBT approach to therapy undermines a protocol that dominates traditional therapy, since it involves attending fully to the presence and quality of patients' immediate support networks, instead of simply concentrating on mere symptoms or individual issues. This should enjoin therapists to help them find, maintain and stay close to social resources, since social proximity is a baseline state for human beings.

An SBT approach deviates from mainstream therapies in that it valorizes the power of love and touch in the healing of trauma: traditional therapies, since Reich, tend to fear, and thus neglect the body. If therapists took Coan's research on board the therapeutic task should become much less draining for both parties, since myriad survival, therapeutic and relational dangers are posed by the hyper-vigilant alarm systems of PTSD and BPD victims.

And, further, SBT chimes very well with the findings of the Roseto study, with Tyrer's nidotherapy, the critiques of the Critical Psychiatry Network, and the work of those like Haigh, Pearce, Singleton, Smail and Susan Williams who insist on the importance of belonging and community to human health.

We need to note, though, that the hand-holding experiment of Coan et al. took place in the context of a mild shock, and the anxiety caused by scanner claustrophobia, so we need further research in order to find out if we can safely extrapolate here and assume that strong social support systems would have similar effects on real people who are still subject to, or have already been victims of, chronic abuse and non-validation, or chronic developmental trauma.

SBT, then, presents exciting, even revolutionary, potential for therapy, research and theoretical development in mental health,

particularly in personality disorders, but its potential extends far beyond any therapy focussed merely on the individual's emotional problems or deficits; and it implicitly buttresses the idea that far more attention should be paid here to the potential of group interventions. It has enormous implications for public mental health policy, adding powerful fuel to the argument that in order to reduce psychic stress and emotional dysregulation far more serious attention, and a massive injection of funding, should be devoted to the maximization of social support systems and to the urgent promulgation of the importance of community to a more enriching life for us all.

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REFERENCES.

1.Acedia, a malady that struck the early hermits, entailed listlessness, torpor, indifference, an inability to engage in any action, - or even in prayer, their initial goal. What predominated in its victims was a taedium vitae, boredom, restlessness, living in the past, overwhelmed by the very thought of a future; a hopelessness, helplessness and collapse of the Theological virtues, Faith, Hope and Caritas(Love). Dürer's Melencolia engraving (1514) is probably the most iconic example of this condition.

Acedia frequently presented itself somatically, with symptoms ranging from sleeplessness to a generalized sickness or debility, along with a host of more specific symptoms, such as motor lethargy, pain in the limbs, fever and a leaden slowness of gait. Nothing made more clear the absolute connection of mind, body and spirit than acedia, and nothing made more difficult the assigning of any clear aetiology to it. The ultimate expression of acedia was a despair that ended in suicide.

Though often assimilated to sloth, one of the Seven Deadly Sins, it was far deeper, more dangerous and more terrifying than that for the early and mediaeval church as it threatened belief itself: the Desert Father, John Cassian, depicted it as "the noonday demon", Satan incarnate, tempting believers from his abode in "foul darkness". He famously described thus a coenobitic monk:

“He looks about anxiously all around him, sighing that none of the brethren come to see him, and often goes in and out of his cell, and frequently gazes up at the sun, as if it were taking too long to set, and so a kind of unreasonable confusion of mind takes possession of him like some foul darkness.”

Acedia was often condemned as a grave moral flaw, with its torpor, frozen indifference, and cold, dry neglect of the one key touchstone of mediaeval Christendom: remembrance of God and His divine commandments. It became a mortal sin when reason consented to a despair about divine goodness. The big question was to what extent was one free to resist a mysterious illness of unknown aetiology which had so many overwhelming physical features. This notwithstanding, the early and mediaeval Church tended to see acedia as a great temptation that the responsible moral agent was expected to resist, especially a holy man devoted to God. For example, the Benedictine Rule directed that a monk showing the outward signs of acedia "should be reprov'd a first and a second time. If he does not amend he must be subjected to the punishment of The Rule so that the others may have fear." I often wonder whether Benedict's Rule, which proposed a structured, communal musical liturgy and many soulful physical activities, wasn't an implicit inoculation against the virus of acedia.

Later, in Renaissance Florence, Ficino often wrote about scholars' risk of falling into melancholy, due to their isolation and neglect of the body, so those who proposed basic manual tasks as an antidote were certainly onto something. A propos, it is worth noting here that depression is rarer among artists like painters and sculptors, who transform materials, than their wordsmith colleagues.

From the early Benedictines and the early Church fathers, then, to Walter Benjamin in *The Origin of German Tragic Drama*, people have all too often deemed acedia to be a moral failing, an indolence of the heart and will that brings great men down, who, like Hamlet, are immobilized by “the pale cast of thought”; in thrall to saturnine acedia. This inability to act and make decisions was in sharp contrast to the agency of the traditional tragic hero.

French 19th C. ennui, German Romantic Weltschmerz, incarnated in heroes like Werther, may be seen as classic avatars of acedia. Later,

Chekhov's Cherry Orchard, too, is another great articulation of the frozenness of depression which immobilizes and emasculates a privileged society still deeply attached to the past, while incapable of imagining or creating a future. Aldous Huxley more recently assimilated acedia to modern depression.

2. Rees, WD, Lutkins, SG, The Mortality of Bereavement, BMJ, 1967, 413-16.

3. Leader, D. and Corfield, D. Why Do People Get Ill?, Harmondsworth, Penguin, 2008.

4. "I would believe only in a God that can dance." (Thus Spake Zarathustra.)

"Our first questions of value, in relation to books, people, and music, are: "can they walk? What's more, can they dance?" (The Gay Science.)

"Under the charm of the Dionysian not only is the union between man and man reaffirmed, but Nature which has become estranged, hostile, or subjugated, celebrates once more her reconciliation with her prodigal son, man....Now the slave is free; now all the stubborn, hostile barriers, which necessity, caprice or 'shameless fashion' have erected between man and man, are broken down...Each one feels himself not only united, reconciled, blended with his neighbour, but all as one with him...In song and in dance man expresses himself as a member of a higher community; he has forgotten how to walk and speak; he is about to take a dancing flight into the air...He feels himself a god, he himself now walks about enchanted, in ecstasy... He is no longer an artist, he has become a work of art: in these paroxysms of intoxication the artistic power of all nature reveals itself to be the highest gratification of the Primordial Unity." (The Birth of Tragedy.)

5. Hughes, Crowell, Uyeji and Coan, A developmental neuroscience of borderline pathology: emotion dysregulation and social baseline theory, Jol. of Abnormal Child Psychology, Jan 2012, 40, 1, 21-33. And see Coan, J. A., Adult attachment and the brain, Journal of Social and Personal Relationships, 2010, 27, 210-217.

6. On enhanced immune functioning, see Lutgendorf et al., 2005; and Uchino, 2006, for a review; and for the minimizing of salivary cortisol responses, see Turner-Cobb et al., 2000. On lowering resting blood pressure, see Uchino et al., 1999.

7. Coan, J. A., et al., Lending a hand: Social regulation of the neural response to threat, Psychological Science, 2006, 17, 1032-1039.

8. "Embodied Perception and the Economy of Action", in Perspectives on Psychological Science, June, 2006, 1, 2, 110-122. We should add here that in many situations the visual-perception system helps guide our actions without requiring us to mentally calculate how far we are away from objects at all. Take, for example, driving: if a car brakes on the road ahead, a driver knows when and how quickly to brake or slow down to avoid a collision, not by making a mental calculation of distance, but simply by relating the projected size of the other car to the rate that its apparent size increases in his/her visual field. (In serious threat situations there's no time for cognitive calculations, so the low, thalamic road trumps all others.) In other words, the distance-perception system helps people assess the costs and benefits of actions without the need to explicitly calculate energy and distance. There are times and situations in which cognition is useless for survival.

Distance perception, then, has an adaptive role, informing people about the opportunities for action and their associated costs. For example, as we've seen, the metabolic costs associated with walking up a hill carrying a heavy backpack will make the hill appear steeper and distance to target greater than if we had no baggage. When one is standing on a high scaffolding, the apparent distance to the ground is correlated with one's fear of heights or of falling: a person's psychological/attachment history and its influence on the involuntary muscle system, their attitudes or emotions, affect the perception of distance and may greatly exaggerate the costs associated with achieving a given goal. Belief, imagination and the dominant self-story are what count here, not sharpness of vision or objective, consensual reality.

Interestingly, Proffitt has found that only the specific locomotor system (e.g., walking) involved in the task to be performed affects judgment of distance. But this increases apparent distance ONLY

when one plans to actually walk to the target. His studies show that perceived distances are influenced by the energy required, or imagined to be required, to perform these actions.

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