

Deeper into dopamine

In the second of his *Unfashionable Observations* Nietzsche sketches the extremes of what we would now call a population's norm of reaction. He says,

“There are people who possess so little of this power [*plastische Kraft*, shaping power] that they bleed to death from a single experience, a single pain, particularly even from a single mild injustice, as from a tiny little cut. On the other hand, there are those who are so little affected by life's most savage and devastating disasters, and even by their own malicious actions, that, while these are still taking place, or at least shortly thereafter, they manage to arrive at a tolerable level of well-being and a kind of clear conscience.”¹

Perhaps Nietzsche had witnessed or otherwise learned of these extremes during his service in the Franco-Prussian War.² However metaphorically Nietzsche meant it his remark anticipates the finding of survival psychology that some people die when they need not. After a plane crash the pilot hikes eleven days over snow-covered mountains and finds help. Back at the crash site the passenger with only superficial bruising dies when “Material was there for shelter, fire could be made, water was available and he would not have starved in 11 days.”³ A medical officer in the Second World War “describes a slightly wounded soldier who was brought to the hospital: ‘He died – although his wound was of no importance and there seemed no other medical cause for his death’; ‘. . . some of the deaths did not seem warranted by the physical condition of the men.’”⁴ A woman who had survived a Japanese prison camp said “I feel very strongly that quite a number of people who died shouldn't have done so but they just gave up.”⁵

¹ *The [Stanford] Complete Works of Friedrich Nietzsche, Volume 2: Unfashionable Observations* (tr. Richard T. Gray 1995) 89-90. German text: <http://www.nietzschesource.org/#eKGWB/HL> .

² His Swiss citizenship barred him from bearing arms, so he volunteered as a medical orderly and was trained for the work by professionals at Erlangen where two hundred wounded were housed. He was soon assigned to the intensive care (*zur speziellen Behandlung*) of four patients. Infection (*Wunddiphtheritis*) befell two of them, which gave him “more daubing to do,” *und ich hatte viel zu pinseln*. In September, 1870 at Ars sur Moselle he and his co-worker Mosengel took charge of eleven severely wounded, badly suffering men (*Schwerverwundete, Schwerleidende*) for transport to Karlsruhe with the patients lying on straw in “miserable little cattle-cars;” five in Mosengel's and six in Nietzsche's. The trip took two days and nights (letter to Vischer) or three days and nights (letter to Gersdorff). Nietzsche wrote to Gersdorff that for a while after the experience he heard a wail “unwilling to quit,” *einen nie endenwollenden Klagelaut*. See letters 98-101, 103 from September and October 1870: <http://www.nietzschesource.org/#eKGWB/BVN-1870> .

³ John Leach “Survival psychology: the *won't* to live,” 24 *The Psychologist* 26 (2011); <https://thepsychologist.bps.org.uk/volume-24/edition-1/survival-psychology-wont-live> .

⁴ John Leach, “‘Give-up-itis’ revisited: Neuropathology of *extremis*,” 120 *Medical Hypotheses* 14 (2018) 14-15.

⁵ *Id.* 15.

John Leach hypothesizes that the underlying cause of this lethal extreme – psychogenic death – is a dysregulation in the dopaminergic system.⁶ The neurological substrate of Nietzsche’s *plastische Kraft* may lurk in part within these circuits; functioning well when they do, and failing when they dysregulate.⁷

Strung out between the two stakes set by Nietzsche lies the range of human behavior in coping with frustration, humiliation, failure, loss, and disaster; accompanied by all that rage, shame, guilt, grief, and sorrow. Yet this range is noticeably skewed toward the pole of robust vitality; and that, one is inclined to believe, for a sound Darwinian reason: Creatures inveterately despairing of their existence have a tendency to die before reproducing their kind.⁸ Indeed it is shocking, Adam Phillips finds, “what people will put up with; it is astounding how few people kill themselves.”⁹ But people do kill themselves,¹⁰ whereas the rate of suicide, if any, among other animals is undetectable. That contrast is a salient aspect of ‘the human difference.’

Heidegger took the human difference to consist in the ‘as-structure.’ “When we ask this question concerning the relation between man and animal, we cannot therefore be concerned with deciding whether or not man is descended from the ape. For we cannot begin to pose this question, let alone answer it, until we clearly appreciate what the distinction between them is and how that distinction should be drawn.”¹¹ In considering that distinction he poses the case

⁶ Specifically “through frontal subcortical circuit dysfunction, particularly within the dorsolateral prefrontal and anterior cingulate circuits, and is consequent upon dopamine disequilibrium within these circuits.” *Ibid.* “It has been observed historically that one response to severe trauma is psychological withdrawal coupled with a loss of meaning, motivation and goal-directed behaviour. Unless recovered this response can deteriorate into apathy and conditions comparable to aboulia and psychic akinesia before reaching a pre-cursor stage for psychogenic death (‘give-up-itis’). This process follows a behavioural spectrum suggesting an independent syndrome consequent upon frontal-subcortical circuit dysfunction that prevents a person from interacting adaptively with his or her environment and viewing death as a coping strategy.” Summary of Leach’s presentation on dysexistential syndrome to be given May 22, 2022: <https://www.bps.org.uk/events/psychology-resilience> .

⁷ By *plastische Kraft* Nietzsche means “that power to develop its own singular character out of itself, to shape and assimilate what is past and alien, to heal wounds, to replace what has been lost, to recreate broken forms out of itself alone. . . . The stronger the roots of a human being’s innermost nature, the more of the past he will assimilate or forcibly appropriate; and the most powerful, most mighty nature . . . would appropriate and incorporate into itself all that is past, what is its own as well as what is alien, transforming it, as it were, into its own blood.” *Unfashionable Observations* 89-90.

⁸ “Creatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind.” W. V. Quine, “Natural Kinds,” in *Ontological Relativity and Other Essays* (1969) 126.

⁹ “On Giving Up,” 44 [No. 1] *London Review of Books* 23 (6 January 2022) 24.

¹⁰ Assuming for ease of estimation a population of 7 billion, about 1 in 10,000. “Over 700 000 people die due to suicide every year. Suicide is the fourth leading cause of death in 15-29-year-olds.” World Health Organization, 13 September 2021; <https://www.who.int/news-room/fact-sheets/detail/depression> . In 2019 “There were nearly two and a half times as many suicides (47,511) in the United States as there were homicides (19,141).” National Institute of Mental Health; https://www.nimh.nih.gov/health/statistics/suicide#part_154969 . 47,511 ÷ 328.3 million ≈ 1.4 in 10,000.

¹¹ Martin Heidegger, *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude* (tr. William McNeill and Nicholas Walker 1995) 179.

of a lizard on a rock. The lizard “has its *own relation* to the rock, to the sun, and to a host of other things. One is tempted to suggest that what we identify [*antreffen*, encounter] as the rock and the sun are just lizard-things for the lizard, so to speak.” But “When we say that the lizard is lying on the rock, we ought to cross out the word ‘rock’ in order to indicate that whatever the lizard is lying on is certainly given *in some way* for the lizard [*irgendwie gegeben*], and yet is not known [*bekannt*] to the lizard *as* a rock. If we cross out the word we do not simply mean to imply that something else is in question here or is taken as something else [*etwas anderes und als etwas anderes genommen*]. Rather we imply that whatever it is is not accessible to it *as a being* [*nicht als Seiendes zugänglich*].”¹² The upshot of the discussion is that “The manifestness [*Offenbarkeit*] of beings as such, of beings *as* beings, belongs to world [i.e. the meaning-world of sense-making]. This implies that bound up with world is this enigmatic ‘as’, beings *as* such, or formulated in a formal way: ‘something *as* something’, a possibility which is quite fundamentally closed to the animal.”¹³

The as-structure, something as something, is the core of *Verstehen*, understanding—the phenomenon of the ‘as’ is “a constitutive state for understanding, existential and *a priori*,”¹⁴ viz.:

“the structure that belongs to understanding as such [*die zum Verstehen als solchem gehört*].” “The ‘as’ is the basic structure whereby we understand and have access to anything [*die Grundstruktur von Verständnis und Zugänglichkeit*].” “The structure of the ‘as’ is the fundamental hermeneutical structure of the being of that being which we call existence (human life).” “Acts of directly taking something, having something, dealing with it ‘as something,’ are so original [*so ursprünglich*] that trying to understand anything without employing the ‘as’ requires (if it’s possible at all) a peculiar inversion of the natural order. . . . [Such an attempt] occurs only *within* an as-structured experience and by prescinding from the ‘as’ – which is the same as admitting that as-structured experience [*das als-hafte Erfahren*] is primary [*Primäre*], since it is what one must first of all prescind from.”¹⁵

Yet understanding – grasping something as something – is not an independent operation. *Verstehen ist immer gestimmtes*. Understanding always has an affect, is always ‘attuned,’ always feels some way or other, “Understanding always has its mood.”¹⁶ And the inverse: *Befindlichkeit hat je ihr Verständnis*. “A state-of-mind always has its understanding.”¹⁷ Heidegger valued what he called ‘basic moods,’ *Grundstimmungen*, for their power to cast the world ‘as a whole’ under

¹² *Id.* 198.

¹³ *Id.* 274.

¹⁴ Martin Heidegger, *Being and Time* (tr. John Macquarrie and Edward Robinson 1962) 190.

¹⁵ Martin Heidegger, *Logic: The Question of Truth* (tr. Thomas Sheehan 2010) 126, 129, 127, 122-123.

¹⁶ *Being and Time* 182.

¹⁷ *Ibid.* “To any state-of-mind or mood, understanding belongs equiprimordially [*gleichursprünglich*].” *Id.* 315.

one affect, one profound disclosure of how-it-is. So he esteems *Angst*, rare and fleeting though it is, for the feeling of dissociation (not his term): in authentic *Angst* everydayness drops away and all formerly familiar things become uncanny; “Everyday familiarity collapses [*bricht in sich zusammen*].”¹⁸ Having come out of this mood one knows what world is. Having glimpsed the unworlded world in which nothing is connected to anything else one now knows ‘world’ as the *Bewandtnisganzheit*, the entirety of meaningful relations of what-for. *Angst* is none other than deliverance into uncanniness, *die Befindlichkeit in der Unheimlichkeit*;¹⁹ that is, alienation from being-in-the-world; feeling the indifference of the Real, its nonresponsiveness to human concerns.

Indeed his former student Hans Jonas claimed that Heidegger – but the same could be said of Ortega y Gasset, Sartre, Camus, and others – had made

“modern nihilism infinitely more radical and more desperate than gnostic nihilism ever could be for all its panic terror of the world and its defiant contempt of its laws. That nature does not care, one way or the other, is the true abyss. That only man cares, in his finitude facing nothing but death, alone with his contingency and the objective meaninglessness of his projecting meanings, is a truly unprecedented situation.”²⁰

¹⁸ *Id.* 233. In *Angst* “the totality of involvements [*Bewandtnisganzheit*] of the ready-to-hand and the present-at-hand discovered within-the-world, is, as such, of no consequence; it collapses into itself; the world has the character of completely lacking significance.” *Id.* 231. *Angst* prescind from everyday as-structured experience. Cf. Roquentin on the tram: “I lean my hand on the seat but pull it back hurriedly: it exists. This thing I’m sitting on, leaning my hand on, is called a seat. They made it purposely for people to sit on, they took leather, springs and cloth, they went to work with the idea of making a seat and when they finished, *that was what they had made*. They carried it here, into this car and the car is now rolling and jolting with its rattling windows, carrying this red thing in its bosom. I murmur, ‘It’s a seat,’ a little like an exorcism. But the word stays on my lips: it refuses to go and put itself on the thing. It stays what it is, with its red plush, thousands of little red paws in the air, all still, little dead paws. This enormous belly turned upward, bleeding, inflated—bloating with all its dead paws, this belly floating in this car, in this grey sky, is not a seat. It could just as well be a dead donkey tossed about in the water, floating with the current, belly in the air in a great grey river, a river of floods; and I could be sitting on the donkey’s belly, my feet dangling in the clear water. Things are divorced from their names. They are there, grotesque, headstrong, gigantic and it seems ridiculous to call them seats or say anything at all about them: I am in the midst of things, nameless things. Alone, without words, defenceless, they surround me, are beneath me, behind me, above me. They demand nothing, they don’t impose themselves: they are there. . . . the veil is torn away, I have understood, I have *seen*.” Jean-Paul Sartre, *Nausea* (tr. Lloyd Alexander 1964) 125, 126.

¹⁹ Martin Heidegger, *Prolegomena zur Geschichte des Zeitbegriffs* (1925), 20 GA 402. Kisiel translates “Dread is nothing but the disposition to uncanniness.” *History of the Concept of Time: Prolegomena* (tr. Theodore Kisiel 1985) 291.

²⁰ Hans Jonas, *The Gnostic Religion: The Message of the Alien God and the Beginnings of Christianity* (3rd ed. 1991) 339.

Lecturing at Marburg in 1925 Heidegger remarks of *Gelehrten* “the despair [*Verzweiflung*] that stalks them.”²¹ It’s possible to hear that comment as inadvertently autobiographical, as Heidegger projecting his own haunt onto others. If Heidegger was even then working ‘among the ruins’²² it would only get worse, sporadic ruination over the next two decades until reaching a crisis at the end of 1945. Two years after the crisis Heidegger told Heinrich Petzet

“When in December 1945 I was brought totally unprepared before the ‘settlement committee’ and was confronted with the twenty-three questions of the inquisitorial hearing, and when I subsequently collapsed [*darauf zusammenbrach*], the dean of the medical school, Beringer (who saw through the whole farce and the intentions of the accusers) came to me and simply drove me away to Gebstättel [the psychiatrist] in Badenweiler.”²³

The chronology is murky. Heidegger makes it sound as if he left the room and dropped at once (*darauf*), which is how Safranski takes it: “To Petzet he said that he had broken down at the ‘inquisitorial hearing’ in December 1945—though more probably this [breakdown] was in February 1946.”²⁴ The terms ‘breakdown,’ ‘collapse,’ etc. mislead insofar as they suggest a sudden felling like a stroke or a heart attack. More likely Heidegger’s condition deteriorated over time until those around him could no longer ignore its disabling severity and called on Beringer to intervene. Archbishop Gröber wrote to papal staff that at his meeting with the philosopher in December 1945, “I told him the truth [*sc. ‘you’re kaputt’*] and he listened with tears in his eyes.” The breakdown seems to have been at that point underway, for Heidegger acknowledged to Gröber’s sister just before his meeting with the Archbishop: “It’s all over with me now.”²⁵ Anyhow for present purposes

“we need only the idea of a man’s ground projects providing the motive force which propels him into the future, and gives him a reason for living. For a project to play this ground role, it does not have to be true that if it were frustrated or in any of various ways he lost it, he would have to commit suicide, nor does he have

²¹ Martin Heidegger, *Logik: Die Frage nach der Wahrheit*. 21 GA 97. *Nun, eitel sind wir Gelehrten ja alle mehr oder minder und die Philosophen ganz besonders; auch die wirklichen machen oft diesen Anschein, weil sie gerade nicht reden von den Verzweiflungen, von denen sie gejagt werden.*

²² Heidegger was “engaged in nothing less than the Herculean task of digging his way patiently and laboriously out of the Nietzschean ruins, like a survivor out of a bombed out city.” William Barrett, *Irrational Man: A Study in Existential Philosophy* (1958) 205.

²³ As cited in Andrew J. Mitchell, “Heidegger’s Breakdown: Health and Healing Under the Care of Dr. V. E. von Gebstättel,” 46 *Research in Phenomenology* 70 (2016) 80.

²⁴ Rüdiger Safranski, *Martin Heidegger: Between Good and Evil* (tr. Ewald Osers 1998) 351. Martin Travers accepts the February dating, adding yet another over-determining factor: “In February, he suffers a nervous breakdown on account of his professional demise and because of a crisis in his marriage brought about by his affair with Margot von Sachsen-Meiningen.” <https://martinheideggerbiography.com/heidegger-chronology/>.

²⁵ *Martin Heidegger* 351.

to think that. Other things, or the mere hope of other things, may keep him going. But he may feel in those circumstances that he might as well have died.”²⁶

The realization that his teaching life had ended in humiliation and disgrace was evidently shock enough to overwhelm Heidegger’s ability to cope: that blow, after a year of chronic stress, broke him.²⁷ So, to resume Heidegger’s account of the matter, he went to pieces and Beringer conveyed him to Dr. Gebattel:

“And what did he do? He hiked for the first time with me through the snow-covered winter forest upon the Blauen [one of the highest mountains in the Schwarzwald]. Other than that, he did nothing [*Sonst tat er nicht*]. But as a human being he helped me . . .”²⁸

Mitchell recounts Gebattel’s background and approach to treatment in order to show the measure to which doctor and patient were simpatico: “There is much in Gebattel’s work that resonates with Heidegger’s interests, and Beringer could not have chosen a better doctor for Heidegger’s treatment.”²⁹ Mitchell shows that Gebattel did not do nothing; rather he talked with his patient about that patient’s ground project.³⁰ The year following the treatment Heidegger writes to Medard Boss, “Perhaps you know von Gebattel, with whom I recently discussed many questions concerning the philosophical foundations of psychotherapy and anthropology.”³¹ Early in the treatment Heidegger writes to his wife from Badenweiler that “what is proper to my thinking [*das Eigentliche meines Denkens*] [Gebattel] sees quite pointedly;” and “Since yesterday I again have the distinct feeling that I am again entering into thinking and will go to work with new power and new experiences.”³²

‘And what did they do?’ They hiked and talked. And Heidegger begins to pep up rather quickly. Remarkably this treatment regimen is the same that Harvey Strassman concluded had saved

²⁶ Bernard Williams, “Persons, character and morality” in *Moral Luck: Philosophical Papers 1973-1980* (1981) 13.

²⁷ In January, 1945 his mother-in-law died in Wiesbaden after an air raid. In February the Allies bombed his hometown of Messkirch, destroying the bank but not the safe in which Heidegger kept his papers. That spring he learned his two sons were MIA on the Russian front. In April the French army occupied Freiburg. In May the surviving fragments of the Third Reich surrendered. The French occupiers seized Heidegger’s house in Freiburg for troop quarters because, as the note in his dossier said, “Heidegger is regarded in the city as a Nazi (his rectorship),” and the French policy was ‘Nazis first’ (Safranski 234). In July (Mitchell’s ‘July of 1946’ p. 71 is a misprint) he was summoned to answer to the French-instigated de-nazification committee of the Freiburg University Senate, and the French military government forbade him to teach. In December his case came back before the Freiburg faculty of philosophy and the teaching ban was affirmed in January, 1946.

²⁸ “Heidegger’s Breakdown” 80.

²⁹ *Id.* 81.

³⁰ He also gave Heidegger glucose injections. *Id.* 85.

³¹ *Id.* 86.

³² *Id.* 87.

prisoners of war from ‘apathy death’: “getting him on his feet doing something, no matter how trivial, and getting him interested in some current or future problem.”³³

How does it work? In a word: dopamine, “which all animals since the urbilaterian have relied on to feel okay.”³⁴ Dopamine plays a “principal role,” Leach writes, “in motivation and modulating the activity of the anterior cingulate frontal-subcortical circuit during willed actions.” The dopaminergic system thereby “serves to determine reactions to changes, expected or unexpected, in environmental conditions, and is essential for coping with the external world.” The extreme reaction of give-up-itis

“occurs in a traumatic situation from which there is, or is perceived to be, no escape and over which a person has little or no influence. Essentially the GUI victim sees him or herself as being defeated. . . . This cognitive appraisal of defeat in GUI victims is important as stress has differential effects on [dopamine] levels in the [prefrontal cortex] and the [nucleus accumbens] which depend on whether the stressful condition is perceived to be escapable or inescapable.”³⁵

The as-structure shows through in Leach’s emphasis on ‘perceived to be,’ ‘sees as,’ and ‘cognitive appraisal.’ When Heidegger took himself as defeated in December of ‘45 – “It’s all over with me now” – he began to ‘decompensate,’ as the jargon goes. *Verstehen ist immer gestimmtes*, and the *Stimmung* now was depressive.³⁶ But why the downhill slide to the point of medical intervention? Why did Heidegger not ‘get over it’ as he had done before?³⁷ Leach notes that if the stress becomes chronic, “or is perceived to be uncontrollable or inescapable, then increased dopamine release activated in the medial PFC [i.e., arousal response to a threatening situation] inhibits [dopamine] release in the NAc to below basal levels . . .” This reduction in dopamine release in the nucleus accumbens is significant because “high levels of NAc [dopamine] [are] associated with an active coping response and inhibition of [dopamine] in the NAc [is] associated with a passive coping response.”³⁸

The passive coping response is essentially to ‘shut down and lay low,’ to ‘freeze.’ “The appraisal of the trauma as uncontrollable inhibits [dopamine] transmission in the NAc shifting the organism into passive coping to save energy and reduce risk.” So long as the organism takes

³³ “‘Give-up-itis’ revisited” 18; citing Harvey D. Strassman, Margaret B. Thaler, and Edgar H. Schein, “A Prisoner of War Syndrome: Apathy as a Reaction to Severe Stress,” 112 *Am. J. Psychiatry* 998 (1956).

³⁴ Peter Sterling, *What is Health?: Allostasis and the Evolution of Human Design* (2020) 116.

³⁵ “‘Give-up-itis’ revisited” 18.

³⁶ Dopamine dysregulation and the anterior cingulate are also implicated in the anhedonia of severe depression.

³⁷ E.g., on March 11, 1945 he writes to Elfride: “I’ve got over the depression; I feel that my strength isn’t at an end yet . . .” Martin Heidegger, *Letters to His Wife: 1915-1970* (ed. Gertrud Heidegger tr. R. D. V. Glasgow 2008) 187.

³⁸ “‘Give-up-itis’ revisited” 18.

active coping as not possible, “then sustained activation of cortical [dopamine] production [in continuous arousal response to the stressor] leads to a profound inhibition of NAc [dopamine] release resulting in behavioural impairments and abnormalities in mechanisms of motivation, including withdrawal and apathy.”³⁹

Again, how do hiking in the snow and talking philosophy combat this pathology of “a normal, passive coping response”?⁴⁰ “Physical activity is known to increase [dopamine] production in rats, monkeys and humans . . .” It seems that the human brain – ‘the gland of glands’ – takes this *boost* of dopamine as a signal that *active* coping has resumed; takes ‘doing something, no matter how trivial’ as for-something, as having a point, a goal, a purpose. “This [dopamine] increase contributes to the modulation of both the NAc, increasing motivation and goal-directed behavior, and the PFC, increasing cognitive functioning leading to an appraisal of the situation as being at least partially controllable. This, in turn, leads to a further increase in [dopamine] production in the NAc.”⁴¹

The talk-component sustains and bolsters this inchoate appraisal of orientation to a goal: “anything involving the future implies a functioning PFC and executive function is necessary to adapt to a new environment, develop coping skills, plan for the future (hope) and establish goal-directed behavior.”⁴² Simply discussing ‘philosophical foundations’ with Gebattel as they trudged along apparently resulted in Heidegger’s “distinct feeling” that he was “again entering into thinking” and that there would be a future for him after all: “will go to work with new power and new experiences.” We may imagine a changeover from ‘Assuming I don’t give up and die tonight I would like to resume this discussion tomorrow’ to ‘I would like to resume this discussion tomorrow.’ The former is a conditional desire, the latter what Williams calls a ‘categorical desire’ (a sign of health):

“Most people have many categorical desires, which do not depend on the assumption of the person’s [continued] existence, since they serve to prevent that assumption’s being questioned, or to answer the question if it is raised. Thus one’s patterns of interests, desires and projects not only provide the reason for an interest in what happens within the horizon of one’s future, but also constitute the conditions of there being such a future at all.”⁴³

³⁹ *Id.* 19.

⁴⁰ “it is proposed that GUI is the clinical expression of mental defeat; in particular, it is a pathology of a normal, passive coping response.” *Id.* 20.

⁴¹ *Id.* 19.

⁴² *Ibid.*

⁴³ “Persons, character and morality” 11.

The objective of Gebattel's therapy was to reconstitute the conditions of the patient's future. His method of treatment was to kick-start a cold *Aussein auf etwas* – 'to be out for something' – and thence to stoke the warming categorical desires of the care-structure.⁴⁴

It worked. "It is under Gebattel's care," Mitchell writes, "that Heidegger recovers from his breakdown and begins a new phase of his career. Heidegger's 'later work' stems from this recovery." Mitchell contends "not that Heidegger's nervous collapse provoked a revolution in his thinking, but that the breakdown gave him a chance to put the theory into practice, so to speak."⁴⁵ Mitchell accordingly traces the modulation in the theme of health and healing in Heidegger's thought from before the war, then in the 1945 dialogue "Evening Conversation," and on to the theme's appearance in his public remarks in 1958 and 1962. Glossing the dialogue Mitchell writes, "Healing is not a restoration to a lost integrity, but an acceptance that healing never comes, or is only ever coming, is an infinite task at the heart of finitude (to call it asymptotic is to privilege completion too much)."⁴⁶

Looking beyond its avatar of 'healing' we recognize the phenomenon of the future itself, "an infinite task at the heart of finitude." A principal avatar of the future in Heidegger's thinking both early and late is 'the call.' In 1951 the ban on his teaching is lifted and Heidegger delivers the lecture course *Was heißt Denken?* There he says "When we follow the calling [*dem Geheiß folgen*], we do not free ourselves of what is being asked. The question [*»Was heißt Denken?«*] cannot be settled, now or ever. . . . Thinking is itself a way. We respond [*entsprechen*] to the way only by remaining underway. . . To answer the question. . . is itself always to keep asking, so as to remain underway [*ist selbst immer nur das Fragen als ein Unterwegsbleiben*]."⁴⁷

The call—*Ruf, Anspruch, Geheiß*—is (the conjectural 'is') a specifically human transduction of signal traffic within a robustly functioning dopaminergic system:

"A system was needed to prod an animal to search for all its key resources *before* they ran out [i.e., an *Aussein auf etwas*]. . . Our urbilaterian ancestors (worms)

⁴⁴ "Its own being is the issue for Dasein': This first presupposes that in this Dasein there is something like a *being out for something* [*Aussein auf etwas*]. Dasein is out for its own being; it is out for its very being in order 'to be' its being. *As such a being-about care is this being out for the being which this very being-out is.* This must be understood in such a way that Dasein as it were *anticipates* itself here. . . . We thus arrive at the overall structure of care [*die Gesamtstruktur der Sorge*] in the formal sense: *Dasein's being-ahead-of-itself in its always already being involved in something.*" *History of the Concept of Time* 294. Care is categorical desiring.

⁴⁵ "Heidegger's Breakdown" 71-72, 88.

⁴⁶ *Id.* 79. Cf. Phillips on psychoanalysis: "Its competence resides in what it can show us about its incompetence. It cures us of the notion of cure." Adam Phillips, Introduction to Sigmund Freud, *Wild Analysis* (tr. Alan Bance 2002) xvi.

⁴⁷ Martin Heidegger, *What is Called Thinking?* (tr. J. Glenn Gray and Fred D. Wieck 1968) Part II, Lecture 5, Summary and Transition pp. 168-169.

solved this challenge with a reward circuit. [Further down the evolutionary line] Hypothalamic neurons, monitoring an animal's internal state, plus external opportunities and dangers, initiate a search well before internal stores are depleted. Any behavior that delivers something better than predicted elicits a pulse of dopamine that makes the animal 'feel good,' that is, satisfied. . . . Liver and muscles store glycogen, and adipocytes store fat. Bone stores calcium, and the spleen stores red blood cells—all resources to call up as needed. But the pulses of satisfaction that move us from one activity to the next and sustain mood cannot be stored. To serve diverse behaviors and learning, the pulse of dopamine that delivers a pulse of satisfaction must necessarily be brief. Consequently, dopamine is promptly removed from the synaptic spaces by transporter proteins so as to prepare neurons to sense the next reward. No matter how wonderful a meal or sexual encounter, the glow soon fades—by design."⁴⁸

'By design' human existence is *ein Unterwegsbleiben*, a staying-on-the-go; 'allostasis' in Sterling's term. Until in due course it ends. In the meantime *floreat hedonia*.

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⁴⁸ *What is Health?* 169, 171.