

PSYCHOLOGICAL FUTURES

Antifragility and the imperative of interdependence

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“Psychological futures” exists at the intersection of psychology and futures—two disciplines with substantial pasts and active scholarship across a variety of schools of thought. My own background and training in both disciplines is best described as “postformal-integral-planetary”¹ and my disposition, or bias, is toward that which brings together, rather than reduces—encompasses rather than isolates—and not only evolves with us but also helps us evolve beyond our egos.² I began thinking about *antifragility* years ago, mostly in terms of heroism science and prior research in “collaborative heroism” (Klisanin, 2016).³ The exploration moved from a place of incubation for me, to the subject of structured research at the beginning of the pandemic (Klisanin, 2020a). It was then that I began to observe a variety of components that appeared to be important to the psychological embodiment of *antifragility*—a pithy definition of which is the *ability to get stronger in the face of stressors* (Taleb, 2014). The author of the term, Nassim Nicolas Taleb, elaborates:

Some things benefit from shocks; they thrive and grow when exposed to volatility, randomness, disorder, and stressors and love adventure, risk, and uncertainty. Yet, in spite of the ubiquity of the phenomenon, there is no word for the exact opposite of fragile. Let us call it antifragile. Antifragility is beyond resilience or robustness. The resilient resists shocks and stays the same; the antifragile gets better.

Taleb, 2014, p. 3

Taleb’s primary area of interest is not psychology; however, his insight, when applied to the psyche, provides us with a radically new concept within which we can imagine thriving amid stressors, volatility, chaos—psychologists currently have no construct with which to offer individuals beyond that of *resilience*. Resilience is powerful. It can help us bounce back from stressors—regain the status quo—return to homeostasis. Resilience works if one has a quasistable situation to which one wishes to return or even the projection of a stable future that one wishes to create. Resilience has been heavily researched, and clinicians have long relied upon it as a support for individuals going through stress, grief, and trauma (Fletcher & Sarkar, 2013). However, over the years resilience has been ascribed characteristics that might better be ascribed to antifragility and might well have been—if the construct had existed. In discussing resilience theory, Richardson (2002) emphasizes the important role of the spiritual

side of human nature—prefiguring what I consider the key feature of antifragility.⁴ For our current purposes, let us differentiate resilience from antifragility by recognizing antifragility as that which enables us to benefit and grow not despite, but rather, because of radical uncertainty. For better or worse, as our future(s) unfurl, antifragility, rather than resilience, is what we will need to thrive amid volatility, uncertainty, complexity, and ambiguity (Si Alhir, 2017). Global events, such as pandemics, refugee crises, and the projected impacts of climate change alone, suggest as much.

Indeed, when looking across the course of human history—of slavery, genocides, war, poverty, starvation, plagues, prior pandemics, extreme prejudice, environmental degradation, and so forth, it seems highly likely that antifragility has been part of the human psyche all along—albeit in an unnamed state. Taleb (2014) suggests as much by remarking that Friedrich Nietzsche captured something of antifragility’s essence in his famously paraphrased quote, “That which does not kill us makes us stronger.” Reading Nietzsche’s words, we can almost imagine that all “antifragility” was lacking, was a name: a *yang* to our *yin*—or vice versa. Naming, as we know, is crucial to the way we make meaning—and thus to the possibilities we can imagine.

It may be tempting to think that we already have an opposite to *fragility*, in the age-old concept of “toughness” or “being tough.” Cambridge Dictionary (2022) defines “tough” in relation to a person as “able to deal with difficult situations and not be easily defeated, frightened, or upset.” Meanwhile, the Online Etymology Dictionary (2022) tells us that *tough* was used in c. 1200 to mean “strong, powerful,” and in c. 1300 to mean “not tender or fragile.” It would be fair to surmise that for nearly a millennium *being tough* has contained within it the concept of *not being fragile*. Still, it stops short of being the same as antifragile because “not being fragile” does not mean “growing stronger”; it means not breaking in the face of stressors. “Growing stronger in the face of stressors” is what differentiates “resilience” and “being tough,” from antifragility.

With this understanding of antifragility in mind, let us turn back to the components I observed during the pandemic and began postulating as important to the psychological embodiment of antifragility. One of the first observations was that some people were utilizing character strengths and virtues to support themselves and others (Klisanin, 2020a). The nightly news and social media were highlighting individuals who were finding creative ways to lift their own spirits and those of others during lockdowns. One young man took to the streets to play the violin, another sang from the rooftops; others played ping-pong through open windows. Hundreds of people clapped from open windows saluting medical personnel as they returned home from work. Employees who served in the humblest of capacities: delivery personnel, grocery store stockers, and cashiers became “essential workers” in honor of their willingness to risk their lives to serve our needs. Bravery, kindness, creativity, playfulness—all of these character strengths and more, were strutting their stuff on the global stage.

To explore the hypothesis that individuals were turning toward character strengths and virtues to support themselves through the pandemic, I launched an online research questionnaire in the Spring of 2020 (Klisanin, 2020b). To categorize the character strengths and virtues, Peterson and Seligman’s (2004) research was utilized. While it is beyond the scope of this essay to report all of the findings, only some of which have previously been presented, the most significant to the topic at hand were that respondents who had direct experience with COVID-19 or were in a more vulnerable situation due to their employment, gave higher importance ratings, on average, for all virtues (Klisanin, 2021a). Specifically, individuals who had been sick with COVID-19 rated all virtues higher than those who had not had the disease. The highest observed difference was for the virtue of Courage, where people who had had the disease rated it higher (statistically significant) than those who had

not. Similarly, respondents who lost a loved one to COVID-19 rated all virtues higher than those who had not experienced such loss. In addition, frontline workers rated all virtues higher than nonfrontline workers. These results indicate that character strengths and virtues played an important role in supporting the most stressed individuals among us (e.g., those who had COVID-19, lost loved ones, or worked the frontlines) (Klisanin, 2021a). Although the research does not enable us to draw a straight line from character strengths to antifragility, by revealing that some individuals relied more on character strengths and virtues during times of heightened stress than others, it strongly suggests this area as worthy of additional research.

Before moving on, it is worth noting that the character strength of Creativity was heavily relied upon during the pandemic. Respondents selected it as (a) one of the top three character strengths they used through COVID-19; (b) one of the top three strengths they wished they had more of to get through COVID-19, and (c) one of the top three strengths they noticed in people around the world (Klisanin, 2021a). This reliance on creativity is worthy of its own research, especially as it pertains to antifragility and creative futures. But, for now, we'll go back to exploring the other observations I made related to the psychological embodiment of antifragility during the pandemic.

In addition to (a) reliance upon character strengths and virtues, the components I noted included: (b) Heightened reliance on the natural world (e.g., during the pandemic people were spending more time outside, exercising, dining, socializing); (c) Heightened ability to adjust/change personal narratives (e.g., remote work was adopted, online studies taken up, childcare considerations impacted family dynamics); (d) Heightened reliance on futures thinking/anticipation/anticipatory systems⁵ (e.g., during the pandemic people thought more about the future, took health precautions, considered relocating, making career changes, and so forth) (Klisanin, 2020c, 2021b, 2021c).

To clarify, these components were based upon what I observed in people who *appeared to me* to be thriving during the pandemic. What thriving looks like in a pandemic is highly subjective. Perhaps the individuals singing from their balconies, or playing ping pong with neighbors through open windows, would not have described themselves as thriving. In the future, we might have a chance to seek out and interview some of these individuals and gain some insight into their inner world—what they were thinking and feeling as they engaged in actions that inspired so many. As it is, we can only know that they took action to lift themselves and others up during a time of uncertainty and grief. To embody *hope* amid *despair* demonstrates an ability to contain paradox. Psychologically speaking, to embody antifragility does not mean that one does not also embody fragility—it means one has gained a complementary strength.

My current thinking is that we can expand our mindset⁶ to encompass antifragility because *antifragility* itself is based upon *interdependence*—*our psyche can withstand shocks and get stronger because we are not isolated*.

This statement brings me to the subjects of transpersonal studies—“unitive consciousness, ... awe, wonder ... transcendence of the self, sacralization of everyday life, oneness, cosmic awareness ... individual and species-wide synergy ... transcendental phenomena”⁷ understudied areas essential to healthy psychological futures, and in turn, creative futures. To delve into this area, I'd like to share an experience that occurred earlier this year after introducing the *antifragile mindset* to students at the University of the Arts, Camberwell College, London (Klisanin, 2021b). Of a number of slides presented that day, two featured prominently in the discussion that followed and require a brief description.

Slide number one contained images of corporate logos including those of Nike, McDonald's, Twitter, WhatsApp, Apple, and Microsoft. While showing the slide, I asked the audience how

many of the images they could name. The relief was palpable. Was I joking? This was too easy. Slide number two contained images from nature including those of a pine branch with needles and cone, fern frond, maple leaf, aloe leaf, foxglove, and bluebird. This time, when asked how many of the images they could name, the silence was palpable.

The level of discomfort brought about by the second slide surfaced during the Q & A. “Why should we know those things on the second slide?” a student asked. “We use the things on the first slide every day—so it makes sense to know them. But the others?” One could almost feel the shoulders shrug—and hear a “Meh.” This was not the reaction I had anticipated. I hadn’t expected the students to know all the plants, nor even the bird—but it never occurred to me that anyone would question the *importance, or value of knowing them*.⁸

The moment hit me in the gut—the heart—the head—and if one is inclined to endorse the possibility: the soul. I’d introduced my theory of the *antifragile mindset* through elaborating its foundation, i.e., *interdependence with the natural world*—we’d even held our breaths to underscore our reliance upon the trees. The student, making a utilitarian argument to support knowledge of branded fast food, athletic shoes, and social media—was readily willing to dismiss knowledge of that from which we derive digitalis, soothing skin care, turpentine, herbal medicines, and maple syrup—not to mention the beauty of the bluebird (better known as the Twitter logo). Not only had I failed to communicate interdependence, but I had also done so spectacularly. Unfortunately, I am not alone.

Our social systems⁹—governmental, educational, religious, and otherwise—our families, our entertainment industries, our social media giants, our institutions—are failing to communicate the essential elixir upon which I would argue, healthy antifragile mindsets and creative futures depend. Lack of wonder, or curiosity about those with whom we share an “orchard in the desert of infinite space,”¹⁰ is lack of curiosity about ourselves—and the potential futures we might imagine and cocreate. The importance of knowing the names of plants and animals isn’t because *we use them*—it is because we are *inextricably bound up with them*. There are, in fact, far too many plants and animals for one person to possibly know, but the *will to know*—that is another matter entirely. The will to know comes with a sense of *wonder*, of *awe*. To be so disconnected from recognition of our own animal-ness (Challenger, 2021)—our own interdependence with the natural world that we don’t care to know some of the most common plants and animals is a tragedy—and a form of abuse—psychological and otherwise, perpetrated upon ourselves and our children.¹¹ Such disconnection not only leads to feelings of alienation but also reduces *what there is to be curious about*—impacting our creativity and the possible futures we can imagine.

We can overcome this abuse through placing *radical embodied recognition of our interdependence* at the center of psychology—healthy psychological futures depend upon our ability to experience *individual and species-wide synergy*. The fragile and antifragile nature of the human psyche depends upon *interdependence—just as our brokenness is not in isolation, so too, our ability to grow stronger under stressors is not in isolation*. By acknowledging the primacy of interdependence within psychology, all other dimensions of human activity—education, economics, politics, would ultimately be altered—for it is only the illusion of our separateness that enables us to continually engage in activities that harm ourselves and others. It is this very illusion that is driving the “Sixth Extinction” (Kolbert, 2014).

In much of the Western world, our systems are failing to address and/or are openly suppressing knowledge of interdependence. One can bear witness to the latter in the ongoing destruction of the natural world, displacement of Indigenous peoples, devaluing or excluding Indigenous ways of knowing, and through ignoring and/or actively discouraging interest in the Earth-based traditions of our pre-Christian/pre-Muslim/pre-Etcetera ancestors. A refusal to recognize interdependence stifles the creative matrix of life—the source of our

own creativity—the elixir of the imagination—the origin of science and art—the knowledge that guides the shaman,¹² the *sine qua non* of the mystics,¹³ the guiding principle of systems science,¹⁴ complexity, and transdisciplinary studies—the stuff of evolution itself. Antifragility is being killed off even as it seeks to share its name and gift us its power. To ensure healthy psychological futures—antifragile-imbued mindsets—capable of thriving in the chaos of today and tomorrow, we need to actively *teach youth to experience their interdependence*.¹⁵

The paradoxical presence of fragility and antifragility is found in nature—we have only to think of the transformation of a caterpillar into a butterfly to witness it in action. Inside a cocoon of its own making, the caterpillar breaks up and dissolves into a gelatinous substance, only to emerge in a new form—a form that provides a new perspective. Just as accepting our fragility offers benefits to the psyche, so too does accepting our antifragility provide us with a way to imagine ourselves confronting unknown stressors and coming out in a form that is not bound to the past, and which carries the promise of a perspective capable of granting us greater insight. As we continue into a century that is already rife with challenges, *creativity* has become synonymous with *hope*—halting global warming, capturing carbon emissions, removing plastic from oceans—changing outdated systems that contribute to social, racial, and environmental injustice—all of these depend upon creativity.

The scale, scope, and type of creativity, innovation, and leadership the future requires can be fostered through recognizing our potential to thrive in the face of chaos. Montuori and Donnelly (2019) describe “the emerging view of leadership as a creative process, and creativity as a leadership process.” Antifragility provides a form of psychological strength capable of supporting this nexus of leadership and creativity.

Antifragility exists because we are *interdependent with all that is*. Our character strengths, experiences in and with nature, our personal narratives, and our ability to anticipate, all arise because we are part of a greater whole—or as Koestler (1976) explained, we are “holons,” or whole-parts.

In summary, the psychological embodiment of antifragility suggests that our psyches can grow stronger from stressors. The components currently postulated to support such a mindset include: heightened reliance on character strengths, time spent in and with the natural world, flexible personal narratives, activation of futures thinking/anticipation (Klisanin, 2021c). The current state of the theory is akin to a site-specific land art sculpture—it is site-specific because it has arisen during a time of tremendous worldwide agitation—including a global pandemic, refugee crises, wars, and the ongoing impacts of climate change—drought, food scarcity, forest fires, and loss of habitat. Just as a land art sculpture is subject to the effects of the sun, wind, rain, sleet, snow, and hail, the theory is mutable, open for critique, and will evolve.

Antifragility is a counterbalance to fragility, providing the psyche with a new perspective that encourages us to think beyond paradox. It emboldens us with the possibility of facing stressors and becoming stronger. But here is the imperative—we cannot do it alone. Just as a caterpillar requires a leaf upon which to loft before beginning its transmutation, so too do we—antifragility underscores what so many have said for so long—we are bio-psycho-social-spiritual animals—we exist because cosmos, nature, family, and friends exist. To confront future challenges, we need psychological futures that actively embrace our essential interdependence.¹⁶

Notes

- 1 Postformal-integral-planetary as explicated by J. Gidley (2007).
- 2 A reference to Walsh and Vaughan’s (1993) *Paths beyond ego: The transpersonal vision*, a collection of contributions that supported the flourishing of transpersonal and integral studies.

- 3 Collaborative heroism brings together online activism and in-person activism, for example, someone marching in a climate march may also be posting on social media. This increases the power of an individual's voice because it can be amplified by the network.
- 4 I define spirituality as our interdependence with all that is and discuss this key feature at greater length in the second half of this chapter.
- 5 Readers interested to learn more about anticipatory systems are referred to Miller, R. (2018).
- 6 Just as there are strategies to help individuals move from a fixed mindset to a growth mindset (Dweck, 2006), there are strategies we can use to move toward an antifragile mindset.
- 7 The *Journal of Transpersonal Psychology*, Statement of Purpose (1969).
- 8 Knowledge of plants and animals depends on many factors, i.e., geographic location, cultural background, socio-economic status, access to the natural world, and so forth.
- 9 By "Our social systems," I am referring to those systems that emerged in the Industrial and Post-Industrial eras which exploit the natural world, either overtly or covertly and which are widespread. There are, of course, societies which live in balanced interdependence with the natural world, such as those of many Indigenous peoples.
- 10 See p.237 in Campbell, J. (1972) *Myths to Live By*.
- 11 In a survey of 10,000 youth ages 16–25 years, Marks et al. (2021) found that inadequate governmental responses to climate change are associated with climate anxiety and distress in young people globally. They argue that "the failure of governments to adequately reduce, prevent, or mitigate climate change is contributing to psychological distress, moral injury and injustice" (p. 10).
- 12 Those interested to learn more about interdependence and shamanism are referred to Narby, J. (2006).
- 13 Many mystics across the centuries have written of interdependence; interested readers are referred to works collected by Hirshfield, J. (1994).
- 14 Readers interested in interdependence and systems theory are referred to the works of Bateson (1979) and Macy (1991).
- 15 Resources for teaching and supporting recognition of interdependence include Macy, J. (2007), *The Work That Reconnects* (DVD), and Macy, J., and Brown, M. (1998), *Coming Back to Life: Practices to Reconnect Our Lives, Our World*.
- 16 After completing this chapter, I learned of Markey-Towler's (2019) research on the "antifragile personality." I highly recommend the article to readers interested in the psychology of antifragility.

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