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Bhutanese Monk | Photo © J. G. Morrison

### ***Individual Theoretics***

By Michael Charles Tobias and Jane Gray Morrison

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The purveyor of biospheric calamities and human notions of hope at once confronts a dizzying chasm: the global exertion of an ecological strangle hold that remains our baffling legacy. Time is running out to alter the profile of that one surviving hominin who made certain Neanderthals die out (save for as much as [2.6%](#) of their DNA surviving in today's European genomes) and who has managed, according to numerous war historians, to kill off some quarter-billion of one another since the time of the Western Renaissance. That same ape who now threatens by way of the Anthropocene a pandemic of extinctions equal to, or in excess of any of the past five known planetary extinction syndromes.

Paleontologists argue how many previous human-like species or sub-species have gone extinct, a number between seven and nearly thirty. But the entropic gulf separating our current behavioral modalities from that of all other species enlists the most potent dangling modifier in the annals of binomial nomenclature. In our recent book, [The Theoretical Individual: Imagination, Ethics and the Future of Humanity](#) (Springer, January 2018) we write:

“*Who* we are as *individuals* is somehow separated, more and more, from *what* we are as a *species*... If a convergence were possible (between individual and species), one would assume we would have had enough time and practice by now to get it right. We have not. One might also argue that it would not serve goodness for the minutely differentiated, nearly seven-and-a-half billion of us (and quickly increasing in numbers, still) to become a uniform force. That might easily backfire in one particularly galling and immediate manner, namely, our total self-destruction, the result of an unquestioning and monolithic choice made on behalf of our entire species: a single mood swing by someone with a sufficient bulwark of power to ignite a nuclear war, to take the most obvious [current] example.

“Whereas our varieties of experiences and genes, our proliferated handprints, make of every different cave wall a new and possibly wonderful illumination that works against the outbreak of Hitlers and Pol Pots and others.

“Yet, despite declarations of hope and courage, this schism persists with aging vehemence. The *royal we* are destroying Earth, challenging our alleged humanity to somehow make a difference in time to save the majority of individuals, both among humans, but even more pressing, among the Others who are so fast vanishing. Seen as a moral crisis [*the moral crisis*] of the moment, but lacking the ‘boldness’ and ‘genius’ Goethe referenced in his Faust, we may well find that our species is capable of analysis in the absence of an actionable momentum. Lingering in the philosophical purgatories of our wish fulfillments, the paroxysms accompanying the evolution of individual departures from the norm – across a time frame of tens of millions of years – depriving us of the catalyst that might yet richly infect a stubbornly inward-dwelling species, we stagger and foment atop the lost cliffs of Kurosawa’s ‘Ran,’ his haggard and betrayed daimyo/King Lear forcing his face into the gusty Eumenides, incapable of imagining family reconciliation.”



Traffic in Downtown New Delhi | Photo ©M. C. Tobias

Upon that cliff we come to the penultimate cliff-hanger. Many years ago, in a *New York Times* cover story, E. O. Wilson asked whether humanity was not [suicidal](#)? We ask, what parameters would need to change were human beings to empower a salutary, rather than annihilatory story-line? This is where deep demography and epidemiology combine to render a new narrative, whose objective commentaries read of individuals of a species effecting species-wide alterations. In our case, such changes are conceptual and ethical. While some data suggests recent physical changes in our jaws and teeth size, the evolutionary chronicles marking our kind during the past 30,000 years or so have been mental, not morphological. The likelihood of our hybridizing with any other species appears to be biologically unlikely, certainly within the much tested world of Carl Linneaus. We do not enjoy the reproductive latitude of a wolf, a dog or a coyote. Our zoological cul-de-sac is real and, by all evidence, final.

So, of great importance is the question whether a *new consciousness* is biologically plausible; a scenario in which rapid evolution may act upon a human cultural set of ethical priorities. Perhaps those same imperatives also happen to favor, for example, the kind of land ethic an Aldo Leopold advocated, or of more than half-century of wilderness-and-endangered species-related legislation.

Of course, if that is a possible scenario, it might be morally problematic for a species which is also straying with ever more deference across this Solar System and beyond. We may not have the level of maturity in terms of evolutionary consciousness to differentiate between the importance of revivifying redwood trees or saving blue whales from extinction, and the terraforming of Mars. Certainly, the more comforting, ecologically intimate and likely permutation is to be a transfixing ethic with critical mass amongst *Homo sapiens* here on Earth, not in earth-orbit, where we have already seen a pile up of space junk, and poorly conceived schemes.



Population Expert Bob Gillespie Standing Before the U. S. Supreme Court | Photo ©M. C. Tobias

There is no evidence to suggest that natural selection is altering the anatomy of our brains. Rather, in real-time we are seeing extraordinary examples of conceptual alteration, whose ultimate ambassadors are lodged in the domain of the *choice*. When you begin to see the same species making a large number of good or bad choices, there is certainly room for rendering philosophical conclusions. When the accumulation of those choices spells success or doom for that species, one can begin to see a picture of natural selection acting upon cultural memes and paradigms.

In our new book we looked at what kinds of choices humans are making, the power of those choices, and their origins. We do so recognizing that quite possibly such outcome-oriented deliberations are the only antidote to human-induced destruction. If natural selection works upon individuals, as well as communities, then [altruistic genes](#)<sup>1</sup>, beneficent characteristics of our organism – with its billions of pieces of DNA, progressive ideas and hard-earned ideals – no matter how dissimulated and rare their viable expression – ultimately matter. The biosphere in which expressions may declare themselves is increasingly stressed and undermined, traditional synthesis and gradualism falling into step with a far more accelerated near-term genetic future in which survivors are taking geographical sides, and making frantic, do-or-die decisions.

One area of particular interest for us is what has been termed the “readiness potential” to ignite a decision, to effect a choice, to change course, to alter one’s mind and to act upon those ignitions. The trajectories from choice are unlikely to leave a fossil record but they may leave us sufficiently unscathed in order to live out our lives with some measure of joy and dignity, should we get it right.

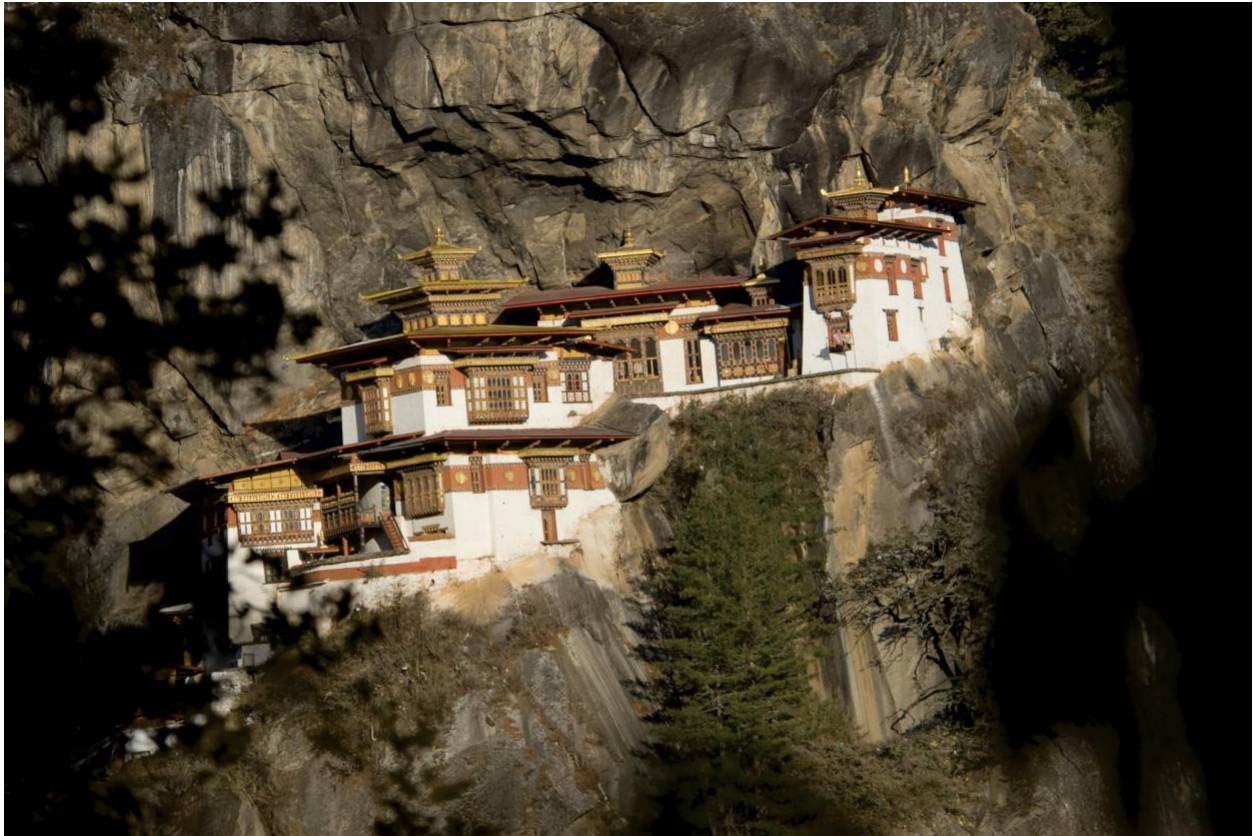
The notion of “readiness potential” does not invoke some set of arcane psychological statistics, but, rather, compelling argument in favor of human brains coming up with massive archetypal transitions and qualified bifurcation points. If, as has been ascertained, [we make over 773,000 decisions in our lives](#) – an adult making 27 judgments every day – we have yet to map the distribution of such judgments or their net worth in terms of ethical suasion. But we know there is great moral weight there, a cartography of pain points, but also of pain amelioration, and that lurking within the origin of every judgment is the potential for great change, the readiness potential.

Based upon [studies suggesting that some 9% of all human genes are rapidly evolving](#), we looked at some of the work of the psychologist Benjamin Libet (1916-2007) who scrutinized the actual time-frame between the subconscious buildup of a decision in humans and the ultimate response acting upon that mental consensus within the individual, the decision point. Libet’s subjects showed that each member of our species, on average, needs approximately 200 milliseconds (two deciseconds, or two-tenths of a second) to move from a thought to an action, something Libet termed the “[Bereitschaftspotential](#),” or the aforementioned *readiness potential*. This potential is equivalent to a catalyst within a perpetually ready sphere that Libet characterized as the “*conscious mental field*,” a coherence of neural and subjective connections. The emergence of that coherence may occur more slowly than within two

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<sup>1</sup> Reuter, Frenzel, Walter, Markett & Montag. 2010. *Social Cognitive and Affective Neuroscience*. [Investigating the genetic basis of altruism: the role of the COMT Val158Met polymorphism](#)

deciseconds –in as many as seven seconds– before we even know that we have made the [decision](#). But the decision *will* be taken and we know that it is possible to effect change based upon conceptualization. By turns, this leads inevitably to what may well be the makings of a new nature, a set of forces in sync with ethical and conceptual selections. It is still evolution at work, but conscious evolution.



Taksang Monastery, Bhutan | Photo ©M. C. Tobias

However fundamental these attributes of the human behavioral arsenal might seem, at first, in our concluding remarks we find such testimony quite crucial. We write, “Hence, the sum total of choices and that community of like-hearted predilections – tied to members of the only biosphere we know of, at present – whose origins and present tense behavior all suggest some kindly organism.” And we continue, “...of organisms that behave decently; that act resiliently and, as the situation doth demand, selflessly, out of *true love*, a wondrous phrase mightily overused such that we might be tempted...to hazard some other linguistic or conceptual embodiment in so confusing and magnificent a world. An entirely different paradigm of original characteristics. But, to be clear, there isn’t one.” True love captures best whatever it is our species is capable of.

This “readiness potential” in humanity’s odyssey could not be more relevant and timely, corresponding with massive ecological protection, restoration and a universal emphasis on re-wilding, habitat liberation and widespread efforts to stop the *slaughter of innocents*. The *theoretical individual* may well be that embodiment of a set of conceptual catalysts spread out over multiple communities, all subject to the most harmonious evolutionary instincts and impulses, whose time has come.

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