

## PSYCHOLOGY

# Holding on to happiness

Sonja Lyubomirsky welcomes a call for society to encourage people to ‘flourish’.

The premise of positive psychology — that it is as important to investigate wellness as it is to study misery — has reached the mainstream. Discussed routinely by politicians, educators and mental-health professionals, the field’s influence has grown rapidly. Martin Seligman, director of the Positive Psychology Center at the University of Pennsylvania in Philadelphia, is the scholar, educator and charismatic leader who has championed these ideas passionately for more than a decade. In *Flourish*, his most personal and boldest book so far he argues that we should set aside “happiness” as a goal, and embrace a broader measure of well-being, which he calls “flourishing”.

Seligman shares a wealth of insights and stories, mostly compelling and sometimes maddeningly digressing, which cast light on his passions and pet peeves. His wisdom and audacious opinions explain why he has attracted legions of both followers and high-profile critics, including writer and columnist Barbara Ehrenreich and *New Yorker* journalist Jane Mayer.

Two themes run through the book. The first is that the study of optimal human functioning must be grounded in rigorous science. The second is more controversial: positive-psychology researchers have a duty to make the world a better place. Seligman’s book is a paean to applied science, a blueprint for how to translate empirical evidence from the laboratory to the real world.

Seligman describes several applied initiatives that he has conceived and shepherded. In education, he has created and implemented curricula to develop character strengths (such as kindness and leadership), build grit (passion and perseverance) and enhance positive emotions (happiness and gratitude) in schoolchildren and undergraduates. For example, children at risk of depression are guided to identify their top signature strength (such as loyalty)

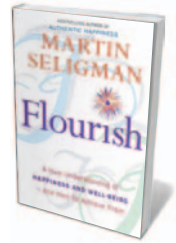
and use it in a new way at school each week. Seligman also teaches the theory and research behind positive psychology to individuals in a range of occupations — from life coaches and entrepreneurs to policy wonks and fitness instructors.

The most impressive effort Seligman discusses is the Comprehensive Soldier Fitness programme now being implemented across the US Army community. The programme, profiled in a special issue of *American Psychologist* this January, involves measuring “psychosocial fitness” and building resilience in several life domains: emotional, social, family and spiritual. For example, sergeants are trained to avoid thinking the worst when faced with adversities, and soldiers are taught to identify emotions in others. This is a rare

opportunity to change the culture of a huge institution that is not known for prioritizing emotions, to prevent suffering (including suicide and post-traumatic stress) and bolster both flourishing and effectiveness in military roles.

It is no accident that this book is titled *Flourish* yet Seligman’s preceding best-seller was called *Authentic Happiness*. He professes that he now detests the word “happiness”, for three reasons: it is overused and nearly meaningless; it is measured subjectively; and it connotes smiley-faced cheerfulness and hedonism. However, the alternative terms proffered by Seligman — flourishing, well-being, meaning, love and growth — are no more likely to elude these problems.

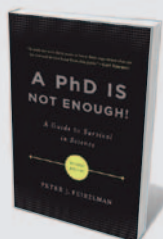
Setting out a new theory of well-being, Seligman posits that flourishing has four elements or pillars: positive emotion (happiness, satisfaction, engagement); meaning; positive relationships; and accomplishment (mastery). It is hard to argue with this intuitively appealing thesis. However, it has its weaknesses. First, Seligman’s theory confuses the elements of well-being with the contributors and consequences of well-being. For instance, people who report that they are happy are more likely than their less-satisfied peers to have meaning, good relationships and accomplishment in their lives. These factors may be sources of happiness — having a good marriage makes one more happy, for example. Or they may be outcomes — happier people are likely to forge satisfying relationships.



**Flourish: A Visionary New Understanding of Happiness and Well-Being**  
MARTIN SELIGMAN  
Free Press/Nicholas Brealey Publishing:  
2011. 368 pp/408 pp.  
\$26/£14.99



**Size Matters: *Alces alces* (moose email)** by Dana Harel, 2009.



**A PhD is Not Enough! A Guide to Survival in Science**  
Peter J. Feibelman (Basic Books, 2011; \$14.95)

Climbing the scientific career ladder is difficult, and the first steps from doctoral student to postdoc are the most precarious. Drawing on his experience as a physicist in academic and government labs, in his new edition Peter Feibelman offers career guidance to those entering the research job market.



**Poseidon's Steed: The Story of Seahorses, from Myth to Reality**

Helen Scales (Gotham Books, 2010; \$15)

The weird world of the seahorse is explored by marine biologist Helen Scales. She describes its peculiar biology and the threats it faces, and reveals its importance to humans, from its role in Chinese medicine to ancient seahorse myths.

COURTESY OF THE ARTIST/FREY NORRIS GALLERY, SAN FRANCISCO

Second, although the four pillars are correlated, they do not necessarily amount to a single structure: they need not occur together and may originate and evolve differently over time. For example, a public servant who is passionate about his work may experience a great deal of positive emotion and meaning over the course of his career, but his relationships may suffer if he overworks. A selfless Mother-Theresa type may have meaning, accomplishment and fulfilling relationships, but experience little joy. These examples point to a third concern: it is not clear whether Seligman's conceptualization of well-being is shared among cultures.

Third, there is no empirical evidence that constructs such as meaning or love can be measured more objectively than happiness. If happiness is "all in one's head", as Seligman asserts, then so are some of the four pillars. Terms such as flourishing and well-being are useful shorthand, but calling the four pillars a theory is premature.

Seligman's ideas have a great deal of merit, but it is too soon to dispense with happiness. Research reveals that happy people are not self-centred, gratification-seeking hedonists whose lives are lacking in meaning or fulfilment. On the contrary, hundreds of studies have shown that happiness relates to outcomes such as creativity, productivity, effective coping, satisfying marriages, close friendships, higher earnings, longevity and strong immune systems.

Seligman's galvanizing goal for positive psychology is for 51% of the world's population to be flourishing by the year 2051. Unlike many authors, he offers detailed and tested solutions as well as compelling arguments for how societies can aim to raise the amount of positive emotion, meaning, good relationships and accomplishment in their citizens. Even if his four pillars don't quite make a theory, everyone stands to benefit from his initiatives. If they are happy, flourishing or enjoying well-being, people won't care about the labels that researchers attach to those good feelings. ■

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**Size Matters: Second Growth Forest (2008) by Eamon MacMahon.**

**EARTH SYSTEMS**

# The biosphere rebooted

**Michael J. Benton** finds hope for the future in a study of humanity's cooperation with the environment.

**M**any recent books about the fate of life on Earth muse on fragility, tipping points and crises. But some writers see a more hopeful future for the planet. Without ignoring the monumental threats posed by humans, interdisciplinary studies may be offering reasons to be cheerful about the resilience of life in the face of change, and our chances of surviving this and the next century. Australian palaeontologist Tim Flannery's *Here on Earth* follows in this optimistic vein.

By tracing the great shifts in Earth's geochemical and biological systems through time, he argues that life generates ever-more-sophisticated responses to varying planetary conditions. In particular, he notes, "from the most intense competition for survival, cooperation has emerged". Such natural transformations hold lessons



**Here on Earth: A New Beginning**  
TIM FLANNERY  
*Allen Lane/Atlantic Monthly Press: 2011.*  
336 pp/288 pp.  
£14.99/\$25

for future challenges. He develops his theme through parallel accounts of the history of Earth and of life, harnessing an impressive mix of research in geology, chemistry, biology, palaeoanthropology and sociology.

Flannery moves deftly through some difficult science. Early in the book, he espouses British environmentalist and chemist James Lovelock's Gaia hypothesis that life stabilizes the planet and makes it habitable. He explains how chemical cycling during

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**About a Mountain**

*John D'Agata (W. W. Norton, 2011; \$14.95)*  
Writer John D'Agata investigates the US government's plan to store nuclear waste beneath Yucca Mountain in Nevada. He documents the history of the project, its supporters and detractors, and muses on atomic-bomb tests and Las Vegas's diminishing water supply and high suicide rate.



**Nature's Palette: The Science of Plant Color**

*David Lee (Univ. Chicago Press, 2010; \$22.50)*  
The science of plant colour is explored by botanist David Lee, from the decorative use of plant dyes to the chemistry of plant leaf colour. "A compelling case that botany is full of intellectual challenges, many shamefully neglected," wrote Philip Ball in his review (*Nature* **449**, 982; 2007).