

The SPIRAL DYNAMICS® NEWSLETTER

THIS MONTH: A FOCUS ON THE BIO

BY CHRISTOPHER C. COWAN AND NATASHA TODOROVIC

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FEATURES

A FOCUS ON THE BIO

A Focus on the “BIO”

Clare W. Graves’s described his Emergent Cyclical Levels of Existence Theory as a biopsychosocial systems view of human nature. In this issue we’ll focus attention on the “bio” portion of the model with some powerful new information, implications and new products that have become available and that can support your learning and growth.

A Focus on the BIO: Looking at Bruce Lipton’s work

Bruce Lipton is a cellular biologist who challenges conventional wisdom regarding genetics and the power of our genes to influence our behavior. We introduced the Lipton material in our last series of certification programs in Europe to the great delight and enthusiasm of the participants who stayed up long into the wee hours to watch Lipton’s presentation. Discussions on the profound implications of his work and its relationship to the Spiral Dynamics model continued throughout the program.

The Consciousness Mirror

What if you could immediately see how your every thought impacts your body? What if you could monitor your energy levels and get in touch with that zone of meditative contemplation where creativity and inspiration come naturally? How would your life improve if, in the comfort of your own home, you could manage your heart rate, breathing, blood pressure and skin resistance through your own biofeedback mechanism?

Looking at Bruce Lipton’s Work

We finally met Dr. Bruce Lipton at the IONS (Institute of Noetic Sciences) conference in Palm Springs in September. Lipton, a cellular biologist whose thinking is pretty radical in his field, has come to a number of startling conclusions. He challenges three core assumptions in conventional biology: 1) biological processes employ Newtonian physics; 2) genes control biological expression; and 3) neo-Darwinian evolution provides for biological diversity.

According to Lipton, by looking at biology through Newtonian eyes we end up viewing the world and human beings as though matter and the material world are the only things that - matter. Accepting this worldview we would need to dissect life down to the minutest particle to understand it. It follows from this outlook that by obtaining knowledge about the smallest unit of life – DNA and its components - we will be able to control disease, alter life’s structure, enhance other life forms, and free ourselves from dependence on something we couldn’t previously control – fate determined by genes.

Lipton believes that biology is still caught in a Newtonian worldview which limits its ability to understand the whole of cellular structures. He contends that because atoms are both particles and energy fields, which operate at a frequency, then cells also have energy fields; this is left out of the conversation completely. An example he uses to illustrate this point is two heart cells in adjacent petri dishes. When they are placed near enough one another, even while separated by a barrier, they begin to beat synchronously. When one goes into fibrillation, placing a normal beating cell next to it causes it to resume a regular beat in resonance with the healthy cell.

Furthermore, the brain appears to have an additional 'lobe.' Work by Dr. J. Andrew Armour of the University of Montreal, who first introduced the concept of a functional heart brain in 1991¹ pioneered the field of neurocardiology. The Heart Math Institute reports: "changes in brain activity that occur during states of increased psychophysiological coherence lead to changes in the brain's information processing capabilities. Results suggest that by using heart-based interventions to self-generate coherent states, individuals can significantly enhance cognitive performance."² Joseph Chilton Pearce cites a research project done by John and Beatrice Lacey at the National Institutes of Health which revealed that the about 65% of the cells of the heart are neurons like those found in the brain.³ (There is now considerable discussion about "brain" cells in the intestines, as well – the gut feeling might imply far more than we have previously understood.)

The way we interpret stimuli from the environment and the resulting emotion(s) we (choose to?) experience as the brain delivers information to the heart and other organs also determines the messages delivered to the genes which in turn respond to the command, negative or positive, by producing the appropriate proteins.

For a long time Dr. Graves did not put environment first in his theory; he supposed the neurobiological equipment took precedence. Later, and after great consideration, he concluded that environment, the external life conditions, indeed took priority to impact the individual whose organism adapted to more or less stressful conditions.

More significantly, Lipton reveals interesting data that has profound implications on human development: fetal rats respond to the pre-natal environment in which their mothers have to survive and develop according to it. If the mother rat has a high stress, dangerous environment, the baby rat, while in the womb, develops greater musculature and less forebrain with a 50% reduction in mental capacities due to the mother rat being in fear. If the mother rat is nurtured in a safe and caring environment, her offspring exhibit a larger forebrain

and less musculature while in the womb, thereby preparing to enter a different environment.⁴ It appears that many of life's patterns are determined in utero and set pre-natally.

Lipton maintains that control of the biology is through perception of the environment and that love and joy promote growth, whereas fear and stress lead to breakdown of the system. It has long been known that stress impairs immune function; and Lipton takes it a step further to suggest our emotions "rewrite" our genes. Therefore, it may be that perception, not genes, controls behavior, thereby flipping the 'primacy of DNA' around to the 'primacy of the environment.' His conclusion is that the genes DO NOT control the biology and, therefore, unlike many of the broadly touted claims promulgated by proponents of the human genome project, such that miraculous cures would be found for diseases as a result of decoding genes, the master code maker(s) seems to lie elsewhere.

It was Darwin's notion that evolution means the survival of the fittest, but does it? A pioneering French biologist by the name of Jean-Baptiste Lamarck had a theory of evolution which preceded Darwin's. He stated that evolution means the elimination of the weakest. Lamarck inspired Darwin but he reframed Lamarck's thinking. Given Darwin's wealth and Lamarck's poverty, the popularity of Darwin's ideas and the fact that Lamarck's were ridiculed, Darwin had more influence at the time. Therefore, his theory was promulgated through history.

Lipton challenges the Darwinian ideas of random process and natural selection by proposing that an organism under stress will have mutations that are purposeful and directed. Cells in a stationary phase with growth inhibited through stress must produce variation to survive. In an example of cells placed in an environment where the only food available was relatively toxic to them, the cells changed their form, adapted to the environment and thrived on the existing fare, turning toxins into nutrients – the same process advocated at the macro level by William McDonough and others as a solution to sustainability in global trade.

¹ J. Andrew Armour, M.D., Ph.D. Neurocardiology--Anatomical and Functional Principles. The Heart Math Institute, 03011, 2003.

² Rollin McCraty, PhD and Mike Atkinson. "CARDIAC COHERENCE IMPROVES COGNITIVE PERFORMANCE" Proceedings of the Annual Meeting of the Pavlovian Society, Tarrytown, NY, 1999.

<http://www.heartmath.org/education/research-edu-studies/cognitive-performance.html>

³ Mendizza, Michael and Chilton-Pearce, Joseph. *Magical Parent Magical Child*. In-Joy Publications, 2003.

That the bacteria can choose to mutate and rewrite their genes in response to the environment somewhat contradicts the Darwinian idea that evolution is a random process and only the fittest survive since mutations now appear to be purposeful rather than random. This conclusion supports Dr. Graves's principle that the human, under the right kinds of stress and given potential exists, can adapt to the environment.

Darwin is not totally disregarded, however. When the organism is relaxed and in a growth phase, the cells are duplicated and mutations are accidental. Rather than purposeful mutations, randomness operates while DNA does repair work since the intention is to maintain the fidelity of the system. Although the protection phase might keep the species alive in the short term, it is the growth phase that ultimately promotes wellness. In the next article we will discuss one way of promoting relaxation, health and wellness.

A two-hour videotape of Dr. Bruce Lipton's lecture is available...

⁴ Solving the Brain's Energy Crisis*; Ann Gibbons *Science* 1998, 280:1345-1347 (Discusses "genomic imprinting," how regulatory proteins select maternal/paternal genes in response to environment)

Gray Matters J. Netting *Science News* 2001, 159:222-223 (Reviews important contributions of glial cells in brain functions)
 Nongenomic Transmission Across Generations of Maternal Behavior and Stress Responses in the Rat; D. Francis, J. Diorio, D. Liu and M. Meaney *Science* 1999, 286:1155-1158 (Maternal care [i.e., environment] influences child's behavior and can change genetics in next generation)

CONTACT

National Values Center Consulting
 "The Spiral Dynamics People"
 PO Box 42212
 Santa Barbara CA 93140

Phone: 8059620366
 Fax: 8059620306
 Email: info@spiraldynamics.org
 URL: <http://www.spiraldynamics.org>

The Science Behind the BIO

Meet Dr. Bruce Lipton on Video



Lipton proposes: "Our pre- and perinatal experiences form a biological template, which colors subsequent feelings and attitudes about ourselves, our relationships and our connection to Earth and Spirit. Awareness of this important programming mechanism can be used to prevent further harm, as well as heal the places in our

hearts and minds where we ourselves have acquired limiting programs."

(\$45 USD - shipping included in US)

The Fun Behind the BIO

The Consciousness Mirror

It might have been the strange purple thingies wrapped around three fingertips wired to the glowing blue "stone" beside the laptop. It could have been the incredibly beautiful graphics playing on the monitors. Curious onlookers crowding around the few lucky players indicated something was going on. That was in the "trade show" area of the IONS convention. It was there I got hooked on the Journey to Wild Divine.

My addiction started when Alyssa clipped the funky finger sensors to the middle digits of my left-hand. I slipped the cushy headphones on to enjoy some relaxing music while Alyssa moved into the chair next to me to guide the demonstration. Three colored balls floated at the center of the monitor, circling like they were being juggled.

"You're doing that." She said.

"What!?" I looked at her in surprise, then back to the monitor where the balls had expanded their circle.

"You like that, don't you?"

I felt myself flush with excitement as the balls responded in ever widening circles. She smiled as

each ball went completely off the screen in rapid succession – first the red one, then the blue one, then the yellow – then back.

“This is incredible!” I said.

“In this next exercise, instead of raising your energy as you’ve just done, you need to relax. The goal is to stack the stones.” She moved the mouse and with a few clicks a new scene appeared and a stone floated into view. Despite the headphones, I could still hear people shuffling and speaking behind me. Although it was relatively quiet, each time someone spoke my concentration shifted and the stone moved away from its intended placement. (Noise canceling headphones such as those by Philips or Bose to increase isolation would be a nice beginner’s addition.) Only when I became completely relaxed and stilled my mind into a deep meditative state with heartbeat, respiration and galvanic skin response managed would each stone move to the top of the pile and settle in place.

I’ve never purchased a computer game, and the ones I’ve tried in the past (except for the multi-platform game my mega-geek brother programmed) left me bored, disgusted or quickly disinterested. But this one is an exception. In this game there are no weapons, no evil creatures stalking you, no death, no people to hunt and kill or be killed by, no car chases or fast-paced action. There’s nothing to lose and a very different way of winning.

This is an “*inner-active*” game. The objective is self-understanding, self-control, self-awareness, peace and well-being. It is a quasi-spiritual quest in the form of a high-end multi-media production that runs on any reasonably current computer. The music is relaxing, with sounds of waterfalls, laughter and other natural environmental sounds accompanied by a typical New Age, gentle sound and occasional narration/instruction.

In a world inundated by violent media and aggression, what’s most important here is that ***The Journey to Wild Divine*** teaches the opposites – meditation, tranquility, exuberance, and a peaceful alternative in alignment with personal transformation and a harmonious world. Speaking personally, after years of meditating and sometimes wondering, “Am I getting it right? Am I there yet? How much longer?” – yes, very un-Zen

questions, I know - I found that in just a few minutes with the aid of an innovative immediate biofeedback interface, the mythical garden landscapes, and the gentle instructions to guide your inner state, one can reach that place of peace, balance, relaxation and focus in less time – and it’s more fun! This game is an adventure in increasing awareness that takes technology straight into the practical space of health and personal development.

Dr. Graves once thought that the ability to shift into various levels of consciousness at will and dramatic changes in the electrical resistance of the skin indicated some of the upper reaches of the spiral as it had emerged to date, he later regretted discussing these issues and commented that he’d learned not to talk about it. Indeed, this is a game teaching self-awareness and control, and that applies at many Gravesian levels.

With that caveat in mind, I began practicing with the yellow, red and blue balls on a stone terrace as soft music played in the headphones. I got them to fly off the screen, stopped them completely, and then made them fly again in just a couple of minutes. It might have been a fluke, but it seems pretty clear to me that the feeling of joy results in larger circles whereas stillness of the mind slows, then stops them. There is a pinwheel which spins or stops depending on how you move your breath and attention. I’ve been stuck on the purple orb, which sits on a stone slab. After 5-10 minutes, I finally relaxed enough to move it. But the second it shifted my heart leapt and the quiver of excitement (success!) landed it like a rock right back where I’d started. A dozen similar false starts and an hour of focus, finally, into a deep trance state with all internal dialogue silenced, it rose to the top of the screen. Whew.

Will working with this game cause you to raise your ‘Gravesian Level’ to become a Turquoise by mastering breathing, heart rate, and GSR? We seriously doubt it; but we’re very excited about the product anyway! It certainly helps to synchronize the pulse with breath, resulting in a ‘state of coherence’ that leads to a balanced and calm state. It facilitates greater conscious control over some of the body’s functions such as the respiration, blood pressure, muscle tension and sweat gland activity while improving the capacity of the body to regulate itself by increasing awareness and control of our inner emotions. It helps in listening to the self and in understanding the effects

of consciousness and awareness by putting biofeedback into your immediate reach for the practice of attention and intention. Mostly, the Journey is a mirror for your mind-body connection which allows your physiological states and processes to be reflected nearly instantaneously through the "game" mechanism as you journey through a beautiful land of gardens, flowers, castles, mountains, and masters guiding you through a magical mystery.

It is such a delight that when we were invited by The Wild Divine Project, the Journey's creators, to be an ally, we were immediately excited about what we saw and experienced. Indeed, the adventure's transformational aspect incorporates some aspects of what our own work entails so our partnership was a natural fit. We've decided to make the product available to you during training programs and as a part of our regular offering. Our international partners will provide a center point for you to collect your orders, and you may contact us directly for your kit.

By Natasha Todorovic



Your Consciousness Mirror



This is an "inner-active" game. The objective is self-understanding, self-control, self-awareness, peace and well-being. It is a spiritual quest in the form of a high-end multi-media

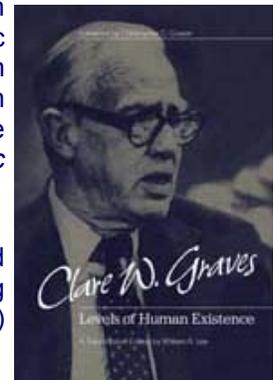
production. In a world inundated by violent media and aggressive games, what's most important here is that **The Journey to Wild Divine** teaches meditation and offers a peaceful alternative in alignment with our mutual interests in personal/planetary transformation.

(\$129.95 until December 31, 2003 then \$159.95 (US Shipping regular 8-10 days \$12)

Origins of the BioPsychoSocial Systems Perspective

Graves: Levels of Human Existence

There is still time to pick up a copy of **Graves: Levels of Human Existence** for the holidays. A new transcription, edited by William R. Lee, Chris Cowan and Natasha Todorovic, of Dr. Graves's 1971 seminar at the Washington School of Psychiatry with original diagrams and descriptions of his foundational research. Also includes an authorized reprint of the classic article, "Levels of Human Existence: An Open System Theory of Values," from the *Journal of Humanistic Psychology*, Fall 1970.



(182 pp, paperback, 2nd printing) \$22.50 shipping included (CA residents add tax) from ECKET Publishing

CONTACT

National Values Center Consulting
 "The Spiral Dynamics People"
 PO Box 42212
 Santa Barbara CA 93140
 Phone: (805) 962 - 0366
 Fax: (805) 962 - 0306
 Email: info@spiraldynamics.org
 URL: <http://www.spiraldynamics.org>

Materials

<i>Quantity</i>	<i>Multi-Media Game</i>	<i>Total</i>
	<p>THE JOURNEY TO WILD DIVINE Computerized Game \$129.95</p> <p>(US Shipping regular 8-10 days \$12 – Quantities are limited!!) (\$25 - \$50 shipping will get it to you in time for Christmas in the US –</p> <p>International Orders: Your local sponsor will have copies early in the New Year. Order now for the reduced rate. In 2004 it will continue to be available for \$159.95.</p>	
<i>Graves Products (Audio Tapes & Book)</i>		
	<p>REFLECTIONS 2-tape set \$23.00 (US shipping included, International add \$2)</p>	
	<p>INTRODUCTION TO THE PSYCHOLOGICAL MAP \$65.00 6-tape set (US shipping included. International add \$5.)</p>	
	<p>GRAVES: LEVELS OF HUMAN EXISTENCE – paperback \$22.50 (\$22.50 US shipping included. International add \$4)</p>	
<i>Bruce Lipton - Video</i>		
	<p>NATURE, NURTURE, & THE POWER OF LOVE – Video \$45.00 (A Must Have by Dr. Bruce Lipton!) (US shipping included. International add \$4 – also available in PAL. Please specify US or European format.)</p>	
<p><i>Total Including Shipping</i> <i>(California Residents add 7.5% Tax)</i></p>		

Upcoming Training ...

Spiral Dynamics I & II Certification Training in Santa Barbara, CA

February 19-22 & February 23-25, 2004

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