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Civilization: Psychology breakthrough (Part I)

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The bad news is that much of what we thought we knew about mental and emotional disorders is wrong. The good news is that Joe Griffin and Ivan Tyrrell are offering revolutionary insights into human psychology.

Real breakthroughs in the behavioral sciences are rare, and it's smart to beware of hype. But not all scientific progress is incremental. Sometimes, as in the germ theory of disease, it's exponential.

Psychiatrist Farouk Okhai, in his foreword to Griffin and Tyrrell's new synthesis, "Human Givens," suggests that their contribution advances psychology as much as the introduction of the Arabic numeric system with its zero digit advanced mathematics. Over the top? This skeptic is convinced.

Let's start with their explication of depression, which has metastasized in the West over the past two generations. Victims can see that Griffin and Tyrrell know why they wake up exhausted and unmotivated. This alone gives hope. Somebody finally understands what has long baffled the patient -- that peace eludes him even when asleep, and that psychotherapy based on ruminating about past miseries makes depression worse.

"People who have been depressed have never had a satisfactory explanation for their symptoms," Tyrrell told United Press International in a phone interview from England. "Clearly, the pharmacological one -- chemical imbalance in the brain -- is just ridiculous. That is not a cause." Rather, worrying about problems or unmet needs cause the chemical imbalance, he said. Griffin and Tyrrell offer the first scientific explanation for why that happens, and it derives directly from an experiment Griffin performed on himself.

"It's the key experiment of the past 100 years in psychology," Tyrrell said, "because it suddenly makes sense of a major understudied part of brain activity -- the REM (rapid eye movement) state -- which we suddenly realized was a kind of reality generator in which we not only dream, but all sorts of other things happen. As Michel Jouvet said, our instincts are programmed in that. (Jouvet, an eminent French scientist, called REM paradoxical sleep.) "Dreaming is keeping the integrity of our instincts intact in the REM state," Tyrrell said.

This means the brain is an organ that matches patterns by metaphor. It constantly seeks environmental stimuli to match up to both instinctive and learned responses amassed since conception. (Of course, we may also make inappropriate metaphorical pattern matches.) The REM state evolved to program instinctive responses, making them more flexible and responsive to modification from information being processed by the neo-cortex -- the "upper" brain that evolved to serve as a more objective intelligence in coping with the external environment. Griffin, in a phone interview from Ireland, said a mutation about 40,000 years ago enabled humans to "break into the daydreaming brain." This at once released creativity in the human species, "but it also released mental illness big-time," he said, "because the very faculty that enables you to imagine alternative realities also makes you more vulnerable to imagining frightening, scary ones. And that, in turn, causes agitation in your autonomic nervous system, putting pressure on the REM sleep mechanism, triggering off depression or any latent tendency towards bipolar disorder. ...

"A person with a creative imagination finds it easy to go into the REM state," Griffin told UPI. "They find it easy to be able to imagine alternative realities. A person with a more concrete imagination wouldn't do that. And they can cause agitation within their nervous systems by looking at the downsides of things and the upsides of things.

"So on the one hand having accessed that imagination does make for potentially more creativity. But it's no coincidence that all the great Nobel Prize-winning families -- be they coming from the hard sciences or from the arts -- have massive rates of depression in them."

Even in the hard sciences?

"In the hard sciences, yes. Massive rates of depression, bipolar disorder, and psychotic illnesses. As much as in the soft sciences," Griffin affirmed.

To test the function of dreaming, Griffin set up a research program to attempt to predict the content of his own dreams using an alarm clock to wake himself up every two hours for a week. "I think this is one of the first times a scientist has actually done the experiment on himself," Griffin said. "It was obvious there was a connection between dreams and what you were

concerned about the previous day. But I just couldn't figure out what exactly it was that turned into dreams. Some things you were worked up about turned into dreams, and some didn't." By testing his predictions against results, he concluded: "It was stuff that you got emotionally worked up about that you didn't follow through on that became dreams."

Tyrrell said that it's been known for almost 40 years that depressed people dream more, and more intensely, than non-depressed people, "and no one's picked up on the significance of it except Joe.

"Dreaming is de-arousing us every night," Tyrrell told UPI. The excessive dreaming of depressed people throws the balance between their slow-wave sleep and dreaming out of kilter. "And when you dream, you burn up much more energy, and the glial cells aren't refreshed because you're not getting enough slow-wave (stage four) sleep. And that's why you wake up tired.

"And also you've been firing off the orientation response" -- part of the alerting system that draws attention to anything new and potentially threatening -- which exhausts the response. "And we need that in the daytime to motivate ourselves. It's kind of like a double whammy. It's not just tiredness. It's also the inability to orientate yourself, and therefore motivate yourself to do things -- and through that to get meaning (from life's activities)."

Griffin said: "The theory on which we're operating is totally consistent with the existing scientific findings. It extends them; it doesn't contravene them." He said it has been known since the 1960s that depressed people have excessive REM sleep and that waking them can alleviate symptoms. It's also known that antidepressants reduce REM sleep and that depressed people do a lot of rumination.

"All these things are linked," Griffin said. "We're just putting in that missing piece that says the ruminations lead to the excessive REM sleep, which in turn leads to brain exhaustion. So you can directly target the REM sleep problem by preventing the ruminations and rebalancing the sleep." "We notice in working with depressed people that they're very often highly imaginative," Tyrrell said. "But they're misusing their imagination. They're catastrophizing in ingenious ways. A fundamental finding of science and a central plank to our ideas is that strong emotions focus attention, and a focused state of attention is the definition of a trance. But it doesn't just focus attention; it locks attention. It's nature saying, 'This is important."

If one suspects that a bear is in a thicket, it makes sense to arouse the emotions until you can determine if the animal is really there or move a safe distance away. "But if you don't act on that - it's just in your mind -- your attention stays locked," Tyrrell said.

Any strong emotion locks attention. "And when your attention is locked, you do not see the bigger picture. This is why some women marry psychopaths. They're being charmed for a few months ... and then they marry the bloke and find out that he's going to start beating them up on a regular basis. Reality starts to kick in when it's too late."

Why is there more depression now than previously?

"The mental health of the Western world is dramatically decreasing," Griffin told UPI.

"What's unprecedented about the present time is that on one level we've never had it so good because we're not in danger of starving. Our next meal is ensured. We know were we're going to sleep tonight. But the price we pay for that is a much greater risk of developing depression.

"Thinking burns up massive energy in the human brain, anyway. But in a society that's not dealing with immediate life needs, you have more spare capacity to start worrying about what could go wrong. Thinking that turns into emotionally arousing worrying is the risk factor.

"Of course, it is good to think, to search for answers about how to get one's needs met, including the need for meaning. But the problem is now we have more spare capacity to ask, 'What's the meaning of my life? What's the point of it? What's the quality of my relationships?' And people do not have the right kind of information to answer such questions.

"So their introspection is uninformed and, without the knowledge to 'contain' it, they will get emotionally aroused and become depressed.

"That type of thinking -- all that questioning with no answers -- puts massive strain on our REM mechanism," Griffin said. "Whereas if our thinking is directed to concrete problem-solving -- activities necessary to survive, to feed, and to protect our family, and so on -- we wouldn't be asking ourselves those questions and getting emotional."

People in band and village societies often faced some kind of real threat. "That meant that people with good imaginations were solving immediate practical problem and dealing with it in the environment, so the circuit is completed," Griffin said. "There's no incomplete pattern of arousal left there. But when those dangers aren't there, you start getting yourself autonomically aroused, but you can't follow though in the environment. That's what leads to the excessive REM sleep." Griffin said research shows an inverse relationship between depression and violence and wars. "For example, there has been a significant increase in depression rates in Northern Ireland since

they've had peace there. This is found throughout the world. As long as there's real danger to folks, it stops people going into their minds, arousing themselves."

Insight into the brain's pattern-matching gave rise to Griffin's generation of what the authors call the APET model, which they hold to be the key to effective psychotherapy. Good therapy centers around changing meaning from negative to positive, they write, and to change meaning "is to change the template through which we experience reality."

To a layman, the most important elements of the model are that emotions precede thought, rather than the other way around, and that our perceptions are the meanings we attribute to certain stimuli.

In APET the A stands for the activating agent, a stimulus from the environment. The P stands for the mind's pattern-matching of the stimulus both to innate knowledge and to things learned. This, in turn gives rise to emotion -- E. The emotion may inspire thought (T), although thought is not an inevitable consequence of emotional arousal.

All perceptions and all thought, therefore, are "tagged" with emotion, which Griffin and Tyrrell define as "feelings that create distinctive psychobiological states, a propensity for action and simplified thinking styles."

"If you know that emotion precedes thought, then you know that you cannot trust yourself to act when you are emotional," Griffin told UPI.

## Civilization: Psychology breakthrough (Part II)

The first installment of this two-part series described how Joe Griffin in Ireland and Ivan Tyrrell in England developed a new scientific explanation for the origin depression. They showed that depressed people, usually creative and imaginative individuals, worry so much and feel so stuck that they generate excessive rapid-eye-movement dreaming when they sleep. This uses up so much brain energy, the depressed person wakes up exhausted and unable to focus, locking the victim in a vicious cycle.

This explanation is set forth in their new book, "Human Givens."

Explanation is one thing. Efficacy of treatment is another. Griffin and Tyrrell started MindFields College -- in Chalvington, in southeast England -- which trains about 12,500 students per year from Britain's National Health Service and the various social services. What's the record of the new approach in the treatment of depression?

"Once you understand the relationship between dreaming and depression, it makes doing therapy with depressed people so much easier," Tyrrell said. "Today's worry is tomorrow's depression. And you can have an impact on people within 24 hours. We do it regularly. Just explaining the process makes people feel like less of a freak and gives people hope ... whereas before they were in ignorance about why they felt so awful."

"The treatment we recommend builds on elements that are known to have efficacy," Griffin said. By adding physiological calming, relaxation, and efforts to rebalance the sleep, Human Givens therapists get an even higher rate of efficacy. Hundreds of videos show "remarkable results," he told UPI.

"Just as dreams are always metaphorical, so using appropriate metaphors is central to good therapeutic practice," the authors write, "and many people's lives have been changed for the better just by hearing stories that reframe their experiences and give them a new unconscious mental map for charting their way through life's difficulties." Hypnosis, which is an induced REM state, can be effective.

Griffin was asked what he would suggest to a depressed person who doesn't have access to a MindFields counselor.

"Take physical exercise," he replied. "Keep your mind focused outwards off the negative introspection. Know the importance in bringing a bit of pleasure and challenge back into your life. Know that the tendency for black-and-white thinking -- seeing things catastrophically -- is exacerbated by high stress levels. Know that the difficulties you have in thinking and making decisions at the moment is a symptom of your depression, not a symptom of your brain being dysfunctional -- it's a temporary phenomenon."

The "Human Givens" of the book title is also the name of Griffin and Tyrrell's approach to human psychology.

"We come into the world with emotional givens and physical givens programmed into us by our genes to seek in the environment to fulfill," Tyrrell said. Emotional needs include:

- the security of a safe environment in which to develop
- giving and receiving attention
- a sense of autonomy and control

- being emotionally connected to others
- being part of a wider community
- friendship, fun, love, intimacy
- a sense of status within social groupings
- a sense of competence and achievement
- meaning and purpose arising from being stretched in what we create and think.

"If those needs aren't met, for whatever reason, the person starts to suffer distress," Tyrrell said. "They don't develop properly. They can get angry, anxious, depressed, greedy, or whatever." That produces emotional arousal and worrying, which involves the imagination. "Dreaming goes into overdrive, and we have depression."

Griffin was asked whether questioning the quality of our relationships -- asking if we are getting what we need --isn't consistent with the Human Givens approach but also conducive to depression.

"Part of the price of the consumer society that we've created is we've put a consumer orientation onto our relationships," he replied. "And we're asking: 'Are you good enough for me? Are you performing well enough for me? Are you meeting my needs well enough?' Whereas if we could just see ourselves as having made a commitment to chart a life path with this person, and together we've just got to pull through this, and not have such high expectations of each other. "You need to have somebody with whom you can be substantially yourself and who will be supportive of you. But you're more likely to get that if you are less judgmental about the person you are with. And you are more likely to be able to offer it to the other person if you're not running a ruler over them as to how well they're performing for you. We would take better care of each other."

Griffin and Tyrrell are increasingly convinced that schizophrenics are trapped in the REM state when awake. "Their dreaming mechanism has literally broken down, and it's spilling out into waking reality," Tyrrell said. The dream state is the province of the brain's right hemisphere, but if a person is trapped in a waking REM state, with reality happening all around them, the left hemisphere is still likely to be active.

"We suggest that, because the REM state operates through metaphor," they write, "the only way it could make sense of these independent left-brain thoughts would be to create the metaphor of hearing voices, or being watched, or spied upon by aliens -- which easily becomes paranoia." Tyrrell said he has not worked with many psychotic patients, but many of the people he and Griffin have trained report success.

Tyrrell said if psychotics are cared for and calmed with little or no medication, fed properly, kept on a regular schedule, and focused on doing such practical things as crafts and gardening, it strengthens their left hemisphere. The recovery rate of patients so treated is three times higher than those treated with drugs, he said.

Griffin said some cultures accept psychotic phenomena as being more within the normal range of human experience than does Western culture. "Which, of course, would greatly reduce emotional arousal around (psychosis) and speed up the chance of recovery. The more emotional arousal, the more pressure you're putting on the REM state mechanism, and the more the REM state mechanism is going to be operating, producing psychosis."

Emotional arousal around the victim is one of the best predictors of a relapse, Griffin said. "But, of course, the families of psychotics and the people around them are totally stressed out. They don't know that their emotional upset is aggravating the situation."

But isn't it true, Griffin was asked, that if you reward somebody who is acting in a psychotic way with attention, you'll get more psychotic behavior?

"You will. That's absolutely right. ... You have to normalize their world -- make a connection to it -- and then refocus them on reality. The less attention you give them for psychotic behavior, the more therapeutic it will be. That's absolutely right.

"But the way to do it is to join up with their reality. Make an emotional connection. Make them feel secure. Build a feeling of trust. Keep their arousal down. And then refocus them on practical stuff in the environment. They're not totally in the dream state."

Griffin and Tyrrell also offer useful insights into addictions, the placebo effect, and curing post-traumatic stress disorder. Their metaphysical afterward on consciousness, reality, knowledge, and transcendence is highly theoretical but worth the effort.

"Human Givens: A New Approach to Emotional Health and Clear Thinking" is available at amazon.co.uk. Information about MindFields College can be accessed at mindfields.org.uk