

Books - The Head Trip by Jeff Warren

[A good example of someone who's designed their own inner model for states of consciousness. -ed]

An Interview with Jeff Warren

Jeff Warren's *The Head Trip: Adventures on the Wheel of Consciousness* is far less psychedelic than its title might imply. Instead, Warren combines journalism from contemporary research into consciousness with first-hand reports of his own experiments with activities that range from lucid dreaming to meditation to a form of sleep called "the night watch." He weaves all of this into a "psychological and neuroscientific and experiential story of how consciousness changes over twenty-four hours," while stopping to attend to such "adventures" of consciousness as daydreams, the Zone, trances, and something called the Pure Consciousness Event. The result is a compelling first-person account of our daily-increasing knowledge of mental activity.

From Warren's point of view, we need to think much more purposively about the relationship between mind and body, because it turns out that thoughts matter, and are not determined in any straightforward way by neurochemical activity: "consciousness exists in more wildly varied and abundant forms than simple waking, sleeping, and dreaming. By describing some of its different stations, I hope not only to give you some insight into the biological and psychological processes that underlie our changing experience of consciousness -- to reveal, as it were, some of the operating rules of the Self -- but also to show why this matters...[:] not only that we have far more agency over our changing mental states than most of us suspect, but also that each of these states taps into its own unique blend of knowledge and insight."

Warren is an engaging field guide in these adventures, and *The Head Trip* will interest anyone curious about the black box of consciousness. In the interview below, he explains why "dreaming is bananas," why we shouldn't listen too seriously to the evolutionary psychologists' Just-So stories, and why we should think more explicitly about our habits of mind.

What's the origin of *The Head Trip*? From internal evidence, it seems to have been in the works for some time...

The genesis of *The Head Trip* was an accident I had at 21, when I fell out of a tree and busted my neck on a street in Montreal. The hardest part of the recovery was psychological; when I returned to my studies I found I couldn't write essays the way I once could. My style of processing had changed. My thinking went from being very linear and progressive to more lateral and associative. I don't know how much of this interpretation is a flabby split-brain gloss on a problem I had long ago, but I can say that at the time I knew nothing about neurobiology, I only knew I couldn't direct my attention the way I once could; the mental objects I did retrieve were often two preoccupations over from my main concern. It was like fishing for trout and hooking clams. My roommate tells me I used to bawl at my desk and moan about leaving "my brains on the road." Eventually I developed a technique of color-coding my notes by tangent, so that when I veered off into 10 different tangents a day at the end of the week I could still string all the, say, purple tangents together into something like a coherent theme.

After this transformation I became more attuned to inner experience. This was augmented by several years of tedious seasonal tree-planting work, where there was literally nothing to do for weeks on end but plant saplings, swat black flies and endure the shifting rhythms of my own shallow stream of consciousness. I became obsessed with how writers described the texture of everyday awareness, whether it was Edgar Allen Poe describing his sleep onset visions, David Foster Wallace on the fugue state of athletic absorption, or Annie Dillard talking about the unselfconscious moment. I began to collect these descriptions, with the vague idea that one day I would put together a taxonomy of elemental states of mind. A separate interest in the biological function of sleep led me into the fantastically variegated world of sleep and dreaming consciousness. In 2004 I started writing *The Head Trip*.

Its structure is also quite interesting: the longer chapters, plus trip notes, all interspersed with cartoonish illustrations and handy tables. How did you arrive at it?

Each stop on the wheel of consciousness has its own chapter, and every other stop is yoked to an actual adventure of some kind. I spent a long time trying to tease apart the different states, which in the scientific literature are all mashed together. The stages of sleep and dreaming are pretty straightforward; waking is more difficult because the differences are subtler. What's the difference between the daydream and the zone? Between flow and the trance? Between alertness and different species of meditative absorption? And how do they relate to the sleeping

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states? Classifying all of these was immensely pleasurable, comparable -- in reductive ecstasy -- only to the "Consciousness Mixing Board" and "Phenomenological Map of Consciousness" visual figures near the end of the book. (The former a grouping of all consciousness "special effects," the latter a depiction of how waking and sleeping states mirror one in another.)

A lot of these ideas are very abstract so wherever possible I tried to figure out some visual container for them -- either a graphic metaphor in the text, or an actual illustration. In *The Head Trip* the comic panel is to the scientific figure what subjective experience is to objective brain science. Sloppy expressionist truant vs anal materialist authority. The book is supposed to be a bridge between these two worlds. Plus a comic-book theme runs through the entire narrative, which is essentially an X-ray of my own excitable and probably developmentally-delayed thought processes.

One of your key images is the "[wheel of consciousness](#)"; (at least, that's what it's called in the illustrations and the title; early on you write that "the brain is a wheel, and consciousness is a pliant membrane pressed into the rim."); I guess I have two questions about that wheel:

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To what extent is it metaphorical, and to what extent do you think it names something meaningful about the structure of mental experience?

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To what extent do you see your wheel as related to other famous wheels (medieval wheels of fortune, karmic wheels, etc.)?

It's more than a metaphor. Changes in brain and changes in mind map onto one another. So when brain activity has dipped down to the big delta swells of slow wave sleep the corresponding experience is slack; subjects woken at this time have very little to report. Similarly, when waking alpha activity in the brain is desynchronized, there is often some furious mental processing going on. The neuroscientist Richard Davidson and his posse of researchers have reported that the higher the gamma activity in the brains of long-term meditators the greater the corresponding "luminosity" of consciousness. So the contour lines of the brain's

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electrical activity seem, in a very general sense, to follow the contour lines of mental experience. Some of this, no doubt, is causal, but other times, if we're honest, we can only say there is a reflection happening between these two domains. So, as an example, in the REM dream, is the fired-up amygdala *causing* the high emotional content, or is the mind -- freed from sensory constraints and thus prone to rushing into narrative extremes -- is the mind the real driver and we're only seeing that emotional activity *reflected*

in an agitated amygdala? That may sound like a heinously boring question, but experientially it actually makes for high adventure. Plus it gets into the whole deep mystery of existence thing.

The visual wheel is actually more inspired by Jessica Helfand's collection of paper wheel charts in [Reinventing the Wheel](#) (Princeton Architectural Press, 2002) than the Buddhist Wheel of Life, though the Buddhist perspective definitely looms in the background and eventually makes a mangy appearance near the end of the narrative.

Is it fair to say that a chief point of the book is to displace the mind/body (or, psychology/chemistry) distinction? On the one hand, almost all the science you describe is pretty nascent; on the other hand, it also seems as if they tend to point quite clearly to a reciprocal relationship between thoughts and chemicals.

The chief point of the book is to re-empower the mind. The mind -- in the form of expectations, beliefs and, most optimistically, intention -- is a more-than-epiphenomenal driver of actual physical change in the body and brain. You can learn to create your own special effects. You have agency. As I write in the book, "this is both supremely hopeful and utterly depressing, since it means in nurturing, enlightened environments we may be able to cultivate whole new standards of mental health, but in violent, regressive environments we risk spawning awful new permutations of mental affliction. Technology -- that great onrushing field within which our minds are shaped -- compounds all of this, for better and for worse."

As far as the actual relationship between mind and body, that, thankfully, is still a mystery, despite the exaggerated claims of the neuro-reductos, whom I love, and the exaggerated claims of the quantum mysticos, whom I love.

I guess the two other chief points of the book are: 1. to wake people up to the deliriously varied terrain of their nighttime lives, and 2. to help people look beyond black and white waking rationality, which turns out to be just one capacity on a very bright and colorful palette. Different

states of consciousness seem to privilege different styles of knowledge.

It turns out sleep is more interesting than we usually expect -- and that it even has a history! What are some key misconceptions about sleep?

I would like to spiel about dreaming for a moment if you don't mind. The writer Rodger Kamentz tipped me off to a great Borges quote. Borges once wrote: "Lately I've been rereading psychology books, and I have felt singularly defrauded. All of them discuss the mechanisms of dreams or the subjects of dreams, but they do not mention, as I had hoped, that which is so astonishing, so strange -- the fact of dreaming."

The fact of dreaming. When you wake up in a dream and actually take a look around -- it's bananas. It's the absolute craziest goddamn thing in all of human life. Every night we beam down into an elaborate virtual world where we can pound the walls with our oven-mitt fists and sniff giant daisies and have elliptical conversations with archetypal bus drivers. From inside a dream there is nothing vague or washed out about the experience -- dreams are totally real, as real as getting off the plane in Lagos and ordering a beer from some guy at the side of the road. You are at this place -- you're IN it! *At the time it's every bit as solid and real as waking.* Except ... and this is what's so cool... except when you're self-consciously aware inside the dream you can then squeeze up real close to the walls with your little magnifying glass and look for suture marks. You can conduct experiments. You come to realize that there is a set of laws operating in the dream world that is every bit as real as the laws of physics in the waking world. What are these laws? And why aren't there as many scientists down

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with their slide rules and theories as there are out there? We spend our lives in two worlds and yet we only pay attention to one of them -- the other is seen as an embarrassing curiosity, a forum for banality-rehearsal and botched sex.

People protest: "but it's not real, stop living in fantasy." All experience is real. On the personal side, dreams reveal all kinds of junk about the self. On the scientific side, our dreams represent an unparalleled opportunity to examine the dynamics of consciousness. I mean think about it: without sensory input to dilute everything, *you get consciousness in a pure culture.* And it so happens that this pure culture -- The Dream -- runs like an underground creek beneath the waking world, muddying the ground in all kinds of interesting ways.

And that's just the conventional science. Who knows what else we may discover digging around

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in the dream world. For those interested in the woolly world of mind-matter speculation, the epistemological rabbit hole goes very deep indeed.

This is going to sound hyperbolic but I really believe we're at the dawn of a new age of scientific exploration. The external world is mapped; now the explorers are turning inward. The galleons have left port. They're approaching a huge mysterious continent. They won't be the first to arrive. There are paths already cut in the forest, where shamans and monks and others have set up outposts and launched their own expeditions into the interior.

It's a thrilling story, a lurid epic in the making, and yet almost no one has any idea it's happening.

As far as our misconceptions about sleep, I would say the biggest one is this idea that we lose consciousness when the lights go out. This couldn't be further from the truth. At night consciousness just turns inside out. Instead of moving through a world constructed from sensory input, we move through a world constructed from memory and imagination. We do lose certain self-reflective properties, and -- critically -- our short-term memories are compromised so we don't remember many of our experiences. But when you wake people up in the night most of them report some kind of mental activity -- either the strange snap-shot narratives of sleep onset, the fully immersive dreams of REM, or the low-level "mentation" of deep sleep. Even in the emptiest bliss-saturated realms of slow wave sleep the experiencing self remains. Consciousness is 24-hours.

What surprised you the most about brains (or about your brain)?

It's mind I find most surprising. RE: brains, I would say the most surprising thing I learned was about the role expectations -- a big mind culprit -- play not just in shaping experience but in actually provoking specific brain activity. This gets into the whole placebo thing which is also mind-boggling and revolutionary. My guess is placebo will be another big theme in the New World explorations described above.

Were there any cherished beliefs about brains (your brain) that you had to relinquish?

I guess my world-weary evolutionary psychology outlook -- about the hardwired inevitability of our modular mental inheritances -- that pretty much got blown out of the water while researching the book. Now I think the sociobiologists are the cavemen. More interesting than the evolutionary story, to me, is the fresher and more nuanced story of how our neuro-plastic brains interact with our mongrel-fantastic culture.

Except for one footnote, you largely avoid the question of drugs and altered consciousness, despite the prominent role these have played in the study of consciousness (Coleridge & de Quincey with their opium, Freud with cocaine, Burroughs with heroin, Leary with LSD, the Beats with speed and marijuana, the variety of drugs used in religious/spiritual rites, etc. etc.). Can you comment on what we might have to learn from these states?

I'm interested in drug-induced alternations of consciousness, but my feeling is they're the really obvious shit. Too many "investigators of consciousness" overlook the fine-grained shifting texture of day-to-day consciousness. It's the difference between the big budget Hollywood blockbuster and the art house Henry James adaptation. Drug-induced alterations of consciousness have great CGI -- which is fine, I mean who doesn't appreciate form constant explosions and DMT Machine Elves? -- the problem is, character development sucks, or rather, the characters -- and by characters I mean the objects of consciousness -- tend to be cartoons. They're exaggerated, that's what psychedelics do -- "non-specific amplifiers" Stanislav Grof calls them. They expand the whole topography of the mind. It's possible more than this is going on but that's another story.

This expansion can be valuable for understanding consciousness since it boosts the resolution of previously discreet mental dynamics. But cartoons, of course, are caricatures. If you watch only Jerry Bruckheimer movies you risk losing your ability to appreciate -- and even notice -- the subtleties and complexities of real life and consciousness, which, to circle back to my original metaphor, is more like a Henry James adaptation.

That's a long way of saying to understand conscious experience, I think it helps to start from the more subtle naturally-occurring variations, and then work your way out.

Something else I've noticed about the hard-core psychonaut set: if you get too deep into the mind you can become convinced of anything. Certain psychedelics -- ayahuasca, ibogaine, DMT, LSD -- they're like cannons, they can fire you so far that you can't find your way back out

again. People can become permanently disoriented, one basket filled with brilliant insights, one with grotesque delusions. It's serious: the mind is both a reality-perceiving and an illusion-generating machine. So people confuse their metaphysics with their epistemology, to paraphrase the philosopher Jerry Fodor. Even great noetic qualities like profound truthfulness or "unity" are less consoling when you realize that they too may be on-demand effects generated by that murky combination of subjective beliefs and objective brain activity. This doesn't negate the mystical or shamanic worldview, by the way, it just inserts it into a much more challenging context. And it means that when it comes to drugs, you better have a seasoned guide who knows what she's doing otherwise you can lose your marbles.

Relatedly, in recent months there's been a flurry of media attention about scientists/academics who take concentration aids to get their work done. Stories about rich kids using Ritalin, Adderall, and the like to gain an advantage on tests are also legion. These stories are controversial right now -- do you see a movement toward embracing these chemical enhancements to consciousness? (Are there mental practices one might explore as an alternative?)

I would say chemical enhancements are only the beginning. Once market-driven technology gets deeper into the neurobiology we'll see a whole suite of consciousness enhancing goods and services -- from implants to interfaces -- each engineered to tweak a different component of cognition. Just read the transhumanist literature, they're delirious with Utopian plans, like Marxist social engineers crossed with high-tech entrepreneurs.

There are natural alternatives that help with concentration: a good sleep, for one. Meditation and mindfulness training had been use-tested for a few thousand years -- it definitely improves calm focus. And as I discuss in my book, neurofeedback is a noninvasive technology that covers some of the same ground as meditation.

Have you altered your own habits/mental practices in any lasting way as a result of writing the book? Do you still try lucid dreaming, or have you taken up meditation, or reverted back to the "night watch" model of sleep?

I regularly take advantage of the hypnagogic state at sleep onset to work out creative problems -- that's become a fixture in my life. I do meditate, though I'm pretty erratic. When I meditate regularly I notice I'm calmer and I sleep better, but then I get caught up with life and the practice slides. I try to work on being mindful in general, to check when I'm obsessing or zoning out. But

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to be honest this is probably more driven by my nerdy curiosity about how the mind works than any kind of self-improvement program.

I'd love to lucid dream more often, it just takes work. You lose sleep, and there are various techniques you're supposed to practice in waking when you could be doing, you know, normal waking things like everyone else on the planet. So as a result they really only happen spontaneously for me, though sometimes if I wake up in the night -- to my favorite state of consciousness, the Watch -- then I try to slip back into the dream I left, applying the most delicate pressure on the narrative, until the perspective switches and I'm no longer thinking about the scene, but am inside it, lucid and aware, and my heart beats forcefully in my chest, and I go explore.