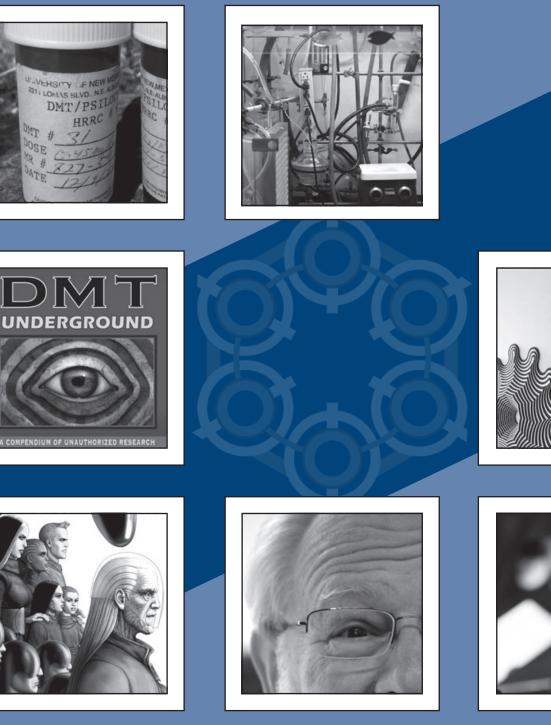


#### November 2012

#### Number 23







The End of a Chemistry Era: Dave Nichols Closes Shop Aliens, Insectoids, and Elves! Oh My! • Psychedelic Gems of the Comic Book Genre

#### LETTERS & FEEDBACK

"Erowid provides a vital service to the medical community because of its strong association with adventurous drug-taking individuals. There is information at this web site that one would never find elsewhere."

Comment on GreatNonprofits.org

-CC

"Along with a colleague at Oxford University, England, I recently conducted a scientific research survey but struggled to get participants who had used drugs to respond. Erowid agreed to help out and within a few months I had received over 1700 responses from people, which is an extremely good number of people for this kind of research and would have been impossible to do without their generous help and service. This is an excellent organisation and continues to increase our understanding and knowledge of drugs and their effects and risks like no other organisation."

> - DR. DAVID LUKE Comment on GreatNonprofits.org

"I have found the tool that Erowid Center provides is invaluable to the work that I do, working with addiction recovery and human services. Something that is this honest and rich with vital information should be praised, and the work that they do will be reflected upon many years to come."

#### - ECKOELAB Comment on GreatNonprofits.org

"I've lived a thousand lifetimes, without you I'd have lived but one. Thank you."

#### – CM Erowid Supporter

"I teach classes on addiction and emphasize critical thinking when it comes to evaluating potential use/ abuse of drugs. I recommend Erowid as a way to stimulate discussion. It provides an invaluable service at a time when there is so much misinformation about drugs fueled by the War on Drugs."

> — BRUX Comment on GreatNonprofits.org

"I am a social scientist who researches illicit drug trends in increasingly internet-saturated societies. Erowid.org comes up time and time again with my participants as a credible site for drug information. Erowid provides a unique service to the community and the Erowids are very knowledgeable on their topic. My research has indicated that the information on Erowid has saved many lives and helped out countless people who would otherwise be in the dark about their drug use."

#### — MONICA11 Comment on GreatNonprofits.org

"We appreciate all the work you guys are doing, year after year. It sets an example for those who have skills with which to provide reliable knowledge in a field that contains ingredients with which one can expand awareness without taking unwise pathways that may damage health or well-being."

> — J & J Erowid Members

"I do expert defense testimony work here in Los Angeles regarding drug issues (use, possession, sales, trafficking, etc.) and Medical Marijuana. Your site is a common stop for up to date and non-slanted info. Thanks again for the work and info."

> — NM Erowid Member

"...Erowid.org is an invaluable resource for students needing comprehensive, well supported, detailed, and unbiased information on psychoactive drugs and plants, as well as for researchers who require access to information related to their own research or teaching. Erowid may not include all information related to psychoactive drugs and plants; but in my work, it is the first resource I consult, and from there, I can quickly access external resources to get more complete information. Erowid.org exemplifies the best kind of web-based resource on these controversial topics that can be found on the web; there should be more like it."

— DENNIS MCKENNA Comment on GreatNonprofits.org We received the following in response to "UK Uses New Power to Ban MXE", which appeared in the News & Updates section of issue 22 of Extracts.

"The Police Reform and Social Responsibility Act of 2011 changed the constitution of the The Advisory Council on the Misuse of Drugs (ACMD) to allow a broadened membership, recognising that experts from the fields of science, law enforcement, health and drug treatment, and social policy have equal importance in council decisions. The previous constitution, written in 1971, specified that only members from the fields of medicine, dentistry, veterinary medicine, pharmacy, the pharmaceutical industry, and chemistry should be considered statutory members. Under the wording of the previous constitution, experts in relevant fields such as criminology, intervention science, drug policy, sociology and psychology would not be considered statutory members.

This change to the constitution reflects the fact that ACMD advice is focused on the potential societal harms of drugs and related issues (for example, recommending the law should be changed to allow provision of foil for heroin smoking or advocating increased availability of naloxone). In light of this I think that describing ACMD as `...largely transformed [...] from an expert advisory panel into a rubber-stamping agency for Home Office policies' or `weakened' is unsupported."

— DR. HARRY SUMNALL Professor of Substance Use, Centre for Public Health at Liverpool John Moores University and ACMD Member

#### Send correspondence to:

#### extracts@erowid.org

Please include your name, title, and city/state/country of origin to be published with your letter. Letters may be edited for length and clarity.

#### Dear Reader,

With this issue of Erowid Extracts, we've temporarily set aside some of our regular features to bring you two special articles. We begin with highlights from the last interview conducted with revolutionary LSD neurophamacologist Dr. David Nichols before his retirement from Purdue in June, followed by a chapter on entity encounters from the forthcoming book, DMT Underground. We hope you enjoy this experimental departure from the typical Extracts format.

> Best wishes, the Erowid Editors

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It is also Erowid Center's goal to support medical, legal, scientific, academic, and independent experts in developing and publishing related resources.

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Number 23, November 2012

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Know Your Body Know Your Mind Know Your Substance Know Your Source

## The End of a Chemistry Era... Dave Nichols Closes Shop

#### Interview by Jon Hanna & Tania Manning

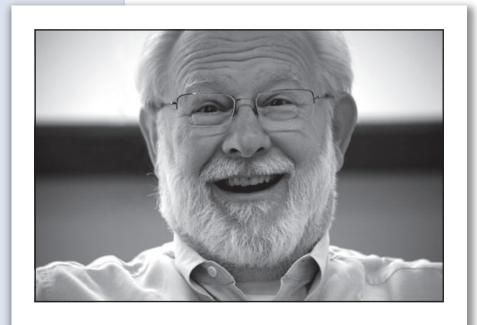
David Nichols, PhD, started his lab at Purdue University in 1974. Since that time, along with teaching medicinal chemistry and molecular pharmacology, he has become renowned worldwide for his prolific work synthesizing and studying psychoactive compounds.

By using newly synthesized chemicals and known compounds as "molecular probes", Nichols has explored how psychoactives interact with the structures and systems of neurons and how changes in neurochemistry affect behavior. His laboratory has published dozens of studies elucidating details of the mechanism of action of MDMA and of the biochemical events related to its neurotoxic effects as seen in animals.

Nichols coined the term "entactogen" as a descriptor for the unique psychopharmacological effects of MDMA and similar drugs. He is an expert on the pharmacology and chemistry of these compounds, as well as LSD, mescaline, and their analogs. He has contributed more than two hundred scientific papers on related topics.

Nichols is President of the Heffter Research Institute, a nonprofit organization that he co-founded in 1993 to promote research with psychedelics "in order to contribute a greater understanding of the mind leading to the improvement of the human condition, and to alleviate suffering."

In June, Nichols retired as professor of Medicinal Chemistry and Pharmacology at Purdue and relocated to the University of North Carolina at Chapel Hill. We jumped at the opportunity to speak with him before the move—and before his lab was dismantled. Although Nichols is well known for his work with psychedelic compounds that affect serotonin receptors, we were intrigued to learn that he has also deeply researched medicinal substances that affect dopamine.



Photos by Jon Hanna

Dave Nichols: Aside from hallucinogens, I have a parallel research track, which focuses on dopamine agonists. With a colleague named Richard Mailman, who was at the University of North Carolina at Chapel Hill, I co-founded a small biotech company called DarPharma. We developed drugs, first in class, for Parkinson's disease, and that may be useful in improving working memory in schizophrenia, as well. We've got six or seven patents now, all in that field, because no one has paid any attention to it. One of the drugs, dihydrexidine, is in clinical trials now. We were going to commercialize it; initially we were looking at Parkinson's disease, although that market is fairly small. It's kind of an interesting situation; since there is no drug out there marketed that has this kind of pharmacology, nobody knew exactly what to do. We eventually hired a new CEO, and she said, "Why aren't you looking at schizophrenia as an indication, because the market is a lot bigger?"

So we paid to have a market analysis done, and it was something like a \$10 billion dollar per year market for this, for improving memory and cognition in schizophrenia. That study is going on now at Columbia University. If it *works*, that will be a proof of principle. We've already proved it works, in monkeys, for Parkinson's disease. It's better than anything that's out there. And if this works in schizophrenia, this would be a game changer. But also, I have all the patents—so it probably would help me in my retirement a little bit. [Nichols smiles]

**Jon Hanna:** Could it also be useful as a nootropic for normals?

**Dave:** We don't know anything about what it would do there. It's never been tested for that kind of indication. There have been studies on drug abuse that showed these sorts of compounds block cocaine craving. And if it improves working memory and cognition in schizophrenia... In the monkeys, they've shown that it improves it in aged monkeys. My guess is that people my age or older could probably take this thing. It's a weird compound-these kinds of compounds-because, in monkeys, you only have to treat them a couple of times, and the effect lasts a year. The doses are  $10^{-4}$  to  $10^{-5}$  mg/kg—it's like 10 µg/kg of monkey weight. This is a drug that maybe, as a human, you would take 100 micrograms every other day for a week, and then, your memory will be back for a year. That would be the most optimistic scenario. Everybody I run into that's past the age of about 40 or 50 says, "I would love to have the memory I had when I was younger." So, if it really worked there, you are looking at a market with a size that is unimaginable. But I'm basically just keeping my fingers crossed for this first clinical trial in schizophrenia.

Because I worked in the dopamine area, as well as with serotonin [5-hydroxytryptamine, or 5-HT], I could see a lot of things. We did the first pharmacology of MDMA in 1982, showing that it was a serotonin releaser. Then we did work on the so-called neurotoxicity and showed there's an interaction between dopamine and serotonin. I could see a lot of that because I also worked with dopamine, and I knew a great deal about dopamine agonists, amphetamine, and so forth.

My funding for research on hallucinogens and dopamine started at almost the same time and ended at almost the same time. I had 28 years of

Plant collections found in Nichols' lab represent the two sides of his research: Coca leaves, containing cocaine (a dopamine-affecting stimulant), and ergot, used in making LSD (a serotonin-affecting hallucinogen). funding for both of those projects. So, really, they're two separate research areas. Being in two different fields made me conversant with things that people, if they just worked in one area, wouldn't have seen.

**Tania Manning:** In 2010, at the Psychedelic Science conference, you mentioned how around the fifth hour of an LSD trip, many people experience a

change in the tone of its effects. Tell us a bit about your research into this.

**Dave:** Yes, right. Danny Freedman was one of the early clinical investigators of LSD when he was at the University of Chicago. I

knew him; we were at meetings together and had written some things together. I would see him, and he'd say, "You know Dave, when we gave LSD to people, the first four or five hours it was very psychedelic and wonderful, and then for *most* people, it would change at about the mid-point. It would get very dark, and some people would get paranoid ideation, and ideas of reference, and things that looked a lot like amphetamine psychosis—paranoid psychosis." He said, "Nobody's ever studied that change in effects, and I think it's important to look at."

Danny's remarks stuck in my mind for a long time. Because we'd worked on MDMA, and knew that activation of serotonin receptors then stimulated dopamine biosynthesis and turnover, I thought, "Well, I wonder if there's something there..." We had done some other research, within mostly the amphetamine/MDMA field, and I started thinking, "I wonder if we could

Because we'd worked on MDMA, and knew that activation of serotonin receptors then stimulated dopamine biosynthesis and turnover, I thought, "Well, I wonder if there's something there..."

see a change in the effects produced by LSD in rats?" Normally we would give rats LSD, and then we would train them 30 minutes later, once they were under the influence of the LSD, to press a lever to get a food pellet. They learned to do that reliably. They learn to recognize the effect of LSD, and once they feel that, they know that they can press a lever and get food. And if you try to use different antagonists to block the effect, 5-HT<sub>2A</sub> receptor antagonists will block the LSD effect and the rats won't press the lever. I suggested to my research associate,



Danuta Marona-Lewicka, "Why don't we wait 90 minutes? Give LSD and wait 90 minutes before we train them?" So she started doing that. Then she came up one day and said, "The rats can learn it!" So I asked, "How well?" and she replied, "Well, I had to double the dose."

I was interested in the possibility that 13-hydroxy-LSD was an active metabolite that interacted with the dopamine system, because the fact that some people were having psychosis-like symptoms during the latter part of their LSD trips might point us to a direction in terms of understanding schizophrenia.

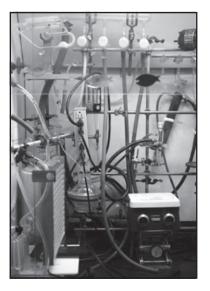
We had been using 0.08 mg/kg of LSD, and she doubled it to 0.16 mg/kg because they could be trained at the original dose, but only about 80% of the rats could learn the lever-pressing task. So she doubled the dose. And actually, 0.16 mg/kg was the dose that almost everybody else had used for LSD studies; so it wasn't out of the range of something that was reasonable. When we gave LSD to rats at that dose, and waited 90 minutes, and then trained and tested, they learned that task really well. But in this case the rat's ability to recognize the effects and press the lever wasn't blocked by 5-HT<sub>2A</sub> antagonists, it was blocked by dopamine receptor antagonists! The pharmacology of LSD had changed in rats over the course of two hours or so; it changed at about midpoint from one that was mediated by activation of serotonin receptors to one that was mediated by activation of dopamine receptors. We thought that might correspond to Danny Freedman's observations in humans.

The dopamine hypothesis of schizophrenia is one that's held sway for a long time. It posits that excess dopaminergic activity is responsible for some of the symptoms of schizophrenia, and—in particular—psychosis. You give amphetamine, or psychostimulants, or cocaine to people in large doses for a long period of time, and they become psychotic. So all of a sudden, LSD brought in this dopamine effect. I thought, "Well, maybe there's something happening there."

We published probably half-a-dozen papers on that. Actually, my son is following that up. When these rats are

given LSD chronically, they start developing very weird behaviors, which are very much like models of schizophrenia in animals. We proposed that this might be an animal model of schizophrenia. The people who are heavily invested in the current models didn't like it too well. But my son is doing a lot of genetics

stuff now; he was trained in *Drosophila* [fly] genetics. He sees changes in gene expression in these rats that parallel some of the things that he's seen in post-mortem schizophrenic brains. In fact, today, he just asked me, "What



Where magic was made...

weight rat should I use? I'm going to start doing this and look at it." The idea is that this might be a model for schizophrenia. The best drugs to treat schizophrenia block both dopamine  $D_2$  receptors and 5-HT<sub>2A</sub> receptors. LSD activates  $D_2$ receptors and 5-HT<sub>2A</sub> receptors. So it kinda made sense. Then the question was, if you had a dopaminergic effect, what could be the *basis* for that? It turns out that, at least in rats, if you pretreat them with something like either DOI or LSD, and you wait two hours-Danuta did a time course, and we did this in rats that were trained to recognize the effects of amphetamine-their response to amphetamine is increased; the potency of amphetamine increases. What this means is, pretreatment with a  $5-HT_{2A}$ agonist causes a delayed sensitization of dopamine systems; that's the way that we interpreted it. It's consistent with what happens with MDMA-the way it turns on dopamine by activating  $5-HT_{2A}$ receptors. So that would fit.

Then there was a PET study published in *Synapse* in 2005, where the researchers administered a PET ligand that bound to dopamine  $D_2$  receptors in pigs. Then they gave LSD to the pigs. Normally you give an animal a positron-emitting ligand drug, in this case it was a  $D_2$  receptor blocker, and then you intravenously give

the drug that you expect to displace it, and you see whether it was displaced, and then you follow its disappearance from the brain. Usually if you give pigs LSD, a very high concentration would be there immediately and you would see immediate displacement of the radioactive ligand, and then you would see a long-term, slower displacing effect. What these researchers observed was, when they gave LSD to these pigs, they did not see maximal receptor occupancy for four hours. They concluded that could mean either that the dopamine system had become sensitized over time, which is exactly what we'd been thinking, or maybe there's an active metabolite of LSD, which is *also* what we'd been thinking. You can't find anything about the metabolites of LSD in the literature from anything more recent than, say, the 1970s. But back then, researchers had identified 13-hydroxy-LSD as one of the human metabolites of LSD. They just identified it, that's all. If it's a metabolite of LSD, well, metabolites are produced in the liver. And you have 15 or 20 isoforms of these mixed-function

oxidases that can put hydroxy groups

onto compounds during metabolism. It varies, depending on *you*. Ethnic groups have different levels of them, there are different mixtures, etc. Depending on what your P450s were, if that isozyme was dominant, it might be producing a lot of 13-hydroxy-LSD; if it *wasn't* dominant, it may be that you don't produce much of it. So then there's a genetic biological basis for explaining why there would be variability, if the change in LSD's effect is actually due to an active metabolite.

I was interested in the possibility that 13-hydroxy-LSD was an active metabolite that interacted with the dopamine system, because the fact that some people were having psychosis-like symptoms during the latter part of their LSD trips might point us to a direction in terms of understanding schizophrenia. When they test a new drug for schizophrenia, they use it in trials of people who are chronic schizophrenics, who are *already* medicated. If we could understand what was going on here with LSD, maybe we could understand the very early etiology, what happens in people who are twelve or thirteen years old who are going to develop schizophreniawhat's the dysregulation that *leads* to that dysfunction. I thought we would have some clues there. And that's what my son is still following up.

**Jon:** You haven't published yet regarding your speculation that the change in LSD's effects after about five hours might be due to an *active* metabolite, right?

**Dave:** Right. I could publish something like that in *Medical Hypothesis*. We've given posters where we have said that it's been postulated that there may be an active metabolite. But we haven't really explicitly outlined what we think might be going on.

**Tania:** Tell us about the NBOMe series. Were the first of those compounds originally synthesized in this lab?

**Dave:** No. Ralf Heim had published a paper, years ago, on some of these compounds. I was intrigued by them, and we probably made 20 or 25 of them, to map out the SAR [structure–activity relationship] and find out what was going on. He'd just made the compounds and never really did any SAR studies. Heim had studied several of these *N*-benzyl phenethylamines. We just fleshed it out more, and probably got a lot more publicity, because his thesis and the publication were in German.



Red Glass Erlenmeyer LSD Flask

We published in the journal *Molecular Pharmacology*, so our work was more accessible. The NBOMes are superpotent compounds. Initially, I didn't think they were orally active.

**Tania:** Switching gears to the Iodo compounds, like DOI, did you mention that these are anti-inflammatory?

Dave: Yeah, that's very weird.

**Tania:** Some guy called in to Sasha's office, saying that he had rheumatoid arthritis, and he took 2C-I, and for two weeks he was pain-free. Which makes me wonder about medical applications for the Iodo compounds...

**Dave:** My son Chuck discovered that accidentally. He's an associate professor at Louisiana State University in New Orleans. He wanted to work with

5-HT<sub>2</sub> agonists, because he's looking at serotonin receptors in *Drosophila*, and doing translational stuff into rats. He asked, "Is there a 5-HT<sub>2A</sub> agonist that's *not* a controlled substance that I can use?" Since DOI was not controlled, I sent him the isomers of DOI.

His team had been using rat aortic epithelial cells-cells from the inside of a rat's blood vessels-and looking at models of atherosclerosis. The model they'd been using was to take these cells, and put in TNF-alpha (tumor necrosis factor-alpha), a proinflammatory substance. If you've seen the advertisements for Enbrel. for arthritis, drugs such as that block TNF-alpha receptors, so they block the pain. What they would do is put TNF-alpha directly into these cells and then they would look at what effect occurred in combination with other compounds-there were four or five compounds that they were looking at.

So his post-doc had some of those cells that were grown up and could be used, and he asked my son, "What if I run a test with one of our compounds in these?" And Chuck said, "Well, I don't have any anti-inflammatory compounds right now." "What about this DOI here?" Chuck laughed and replied, "That's a hallucinogen. That won't do anything." The post-doc said, "Well, I'm going to have to destroy the cells. Can I just go ahead and test it?" And Chuck said, "Yeah, go ahead." The guy came back a week and a half later and said, "The DOI completely blocked TNF-alpha at 20 picomolar." Which is like unbelievable, right?

Chuck said, "Nah. You made a mistake." So Chuck went in, made up his own fresh solutions, took the cells, ran the experiment, and reproduced the guy's data. He wrote me back and asked, "Is there any precedent for this?" And I said, "No, not that I know of." So he published a paper in *J PET*; it was the featured paper in the issue it was published in. This has extraordinary potency; there's *no* anti-inflammatory that has potency like that.

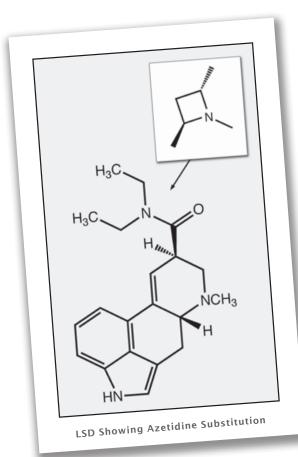
**Jon:** The dose levels you mentioned would not be psychoactive, so perhaps

that's something that could be developed into a commercial medication.

**Dave:** Exactly, exactly. I've sent him a bunch of isomers. But so far he hasn't found anything that's as potent as DOI. And the thing is, the affinity of DOI at the human receptor is like one nanomolar, or around there; so at the concentrations he's using, the amount of receptor that's actually occupied has to be *incredibly* small. There is some mechanism here that nobody really understands; and that was a big controversy when he sent the paper in. People were like, "What *is* this?"

**Jon:** I've noticed that a lot of work has been done with DOI. Is the reason behind that *because* it's not yet scheduled?

**Dave:** Yeah. That's really the only reason. In fact, I have a paper that I'm getting ready to send in—we're just waiting for one more piece of data—where we've made some analogs of DOI due to our anticipating that DOI is going to eventually become scheduled. And DOI is a *really* valuable research tool if you want to study the 5-HT<sub>2</sub>



system. There have been almost 600 papers published that used DOI. If DOI is actually scheduled and people can't use it, this is basically going to be a disaster. So we've got one analog that Tocris Bioscience sells, TCB-2, which is also a 5-HT<sub>2A</sub> agonist. It's never been compared with DOI, but it does kind of the same things. Our new compounds are cyclopropane compounds that look fairly similar to DOI and DOB. We're going to publish on this and suggest that maybe these can "fill in" if DOI is scheduled.

**Jon:** What pharmacology or chemistry do you feel most proud of having come from your team at Purdue?

**Dave:** I wouldn't say it's pharmacology, but one of the cutest things we did was to make azetidine analogs of LSD: using the diethylamide, we took a carbon and hooked the two ethyls of LSD together and that gave us a dimethylazetidine. We had the methyls on the same side of that four-membered ring or on the opposite sides, either with R,R or S,S stereochemistry, showing that it was just *one* of those that was most like

> LSD. This proved that with LSD, when the diethylamide binds, those diethyl groups bind in a specific way. Then we modeled it, and we did mutagenesis of the receptor-and we haven't published this yet-and found that leucine 229 in extracellular loop 2 was the thing that interacted with that diethyl amide. The fact that the receptor has evolved specifically to be complementary to LSD, that is interesting. [Jon intonates *Twilight Zone* theme music.] It took us about ten years to figure out how to do that.

> > First we tried to make an aziridine, which is a threemembered ring. I had a student, Rob Oberlender, who worked on that for a long time. Those were unstable—the ring just broke open. So we went to the four-membered azetidine rings. In medicinal chemistry when you go from

methyl to ethyl or propyl or things like that, you don't expect to see the activity change this dramatically, unless there's a unique binding site or there is some steric restriction binding site. With LSD you change it, and it's different. We pretty much knew there *had* to be some place in the receptor where that was binding. But to actually be able to demonstrate it, and then show that the ethyl groups bind in this specific orientation, and then do the mutagenesis which basically proves that—that was kind of cool.

I made all the MDMA that MAPS is using for their research. In fact, I'm going to ship it to Organix at the end of next week, because they're going to store it for MAPS. I'm proud of being able to do that. Being able to make DMT for Rick Strassman. Being able to make psilocybin. Enabling studies that wouldn't have happened otherwise.

I don't think many people even *know* that my team supplied these drugs. They might know that Dave Nichols is "this chemist." But where did the materials *come from* for the so-called psychedelic renaissance that is occurring?

Rick Doblin called me and said, "I can't find anybody to make MDMA. Can you guys do it?" "Yeah, I can do that." I made a kilo and a half, and MAPS didn't need it all, so we donated it: most of the clinical studies have been done with stuff that I made back in 1986. Strassman, as he says, was the first in a generation to give a psychedelic to humans. I worked closely with him. He said, "Dave, what if I get all these approvals and I can't get the DMT?" I said, "Well, I made the MDMA for Doblin. I can probably make DMT for you." That's exactly what happened. He got to the end and he said, "Nobody wants to make the DMT." So I made the DMT.

Then Roland Griffiths needed some psilocybin, so I was asked, "Can you make psilocybin?" Stewart Frescas and I worked together to improve the synthesis of psilocybin, and that process has been used to make all the psilocybin for the clinical studies. I'm pleased with that contribution. It doesn't look like a major thing, but having psilocybin available at an affordable cost for all these clinical studies has really opened that whole area up, by figuring out a better synthesis and getting the material out to clinical investigators. We spent a couple of years figuring out the best way to make it, then making that first batch of four grams that Roland used in the spirituality study. So that's great. That's a great paper. Even though I didn't *discover* psilocybin, making it available was a good thing.

To some extent, I'm kind of living vicariously through other people's clinical work, knowing that I contributed the material. And now, our synthesis of psilocybin is available. Other people have told me that they sent our improved synthesis method to more people. So it's out there.

Eventually somebody will do a study with LSD. We didn't do it at the Heffter Institute, just because there was still so much social stigma, and it's a long-acting compound. We discussed what we should use when we were going to treat terminal patients. We went with psilocybin because it was more benign, shorter-acting, and nobody knew what it was.

**Jon:** The Heffter Research Institute's well-considered, cautious decision regarding what material was used with that cancer anxiety study laid some solid stepping stones...

**Dave:** Heffter is where I've been able to do the clinical stuff, which I couldn't otherwise have done because I don't have an MD. Working with Franz Vollenweider... with the research he's doing with brain imaging, he's helping unravel the mystery of consciousness itself. That's the *big* question: What is consciousness? Because if we're not conscious, we're not here. You can't really understand *altered* states of consciousness, unless you understand consciousness. That's tied up in a lot of what Franz is doing, but also a lot of what Heffter is doing.

We may treat terminal patients, because that's the first indication and that's where we have the biggest benefit-to-risk ratio—in cancer patients. But I think we are going to find things there that are going to lead us into other areas. People who *aren't* dying are also sometimes anxious and depressed. So then you can say, "Okay, let's do a clinical study and look at *those* people." I think we're going to open up some of these other avenues. For me, it's just the beginning.

**Tania:** How does your work with Heffter tie into what you'll be doing at Chapel Hill?

**Dave:** The people at Heffter are hoping that I'll have more time to work for them after I've retired. If I was going to go into this field today, I might wonder, really, how many more ligands do we need?

I made a bunch of them. Sasha made a bunch of them. Other people have made some. But I don't know what all of those *tell* you, at this point.

We have lots and lots of tools. What's missing is how to connect those tools with how they produce altered states of consciousness. And *there*, I think you need more clinical stuff, more PET scans, more EEG, functional MRI, magneto-encephalography, which nobody has used with a psychedelic at all; you actually get the brain currents. And it's all tied up with the nature of consciousness.

What is consciousness? What produces consciousness? Those are big issues. Psychedelics could be really useful tools in understanding that.

**Jon:** Changing gears, what is your favorite psychoactive plant or chemical?

**Dave:** [laughs] I'll refuse to answer that.

**Jon:** Well, it might be coffee, or chocolate, or wine! And certainly there was a time not *that* long ago when consumption of many of the entactogens scheduled these days was not illegal. How many times, for example, have you taken MDMA, MDAI, MDE, or MBDB?

Dave: Before they were scheduled?

**Jon:** Absolutely before. I'm not suggesting that you're a scofflaw! But I would think that someone with an interest in this area would have some personal

experience with these things, at least at times when one is not going to get oneself into any legal trouble.

**Dave:** If you would think that, then you'd probably be thinking correctly. But I suspect I'm much less experienced than people might imagine that I am. I am conservative by nature, and this is a

I think that if you're gonna have a drug as an entactogenic psychotherapeutic agent, it ought to be one that drug-naive people could take *without* having any kind of an overwhelming experience.

> conservative place. Set and setting are not really conducive. When I initially started, if I had a strong feeling that something was going to be interesting and it was a new substance, well... bioassays were the tradition in chemistry. So certainly I had some feedback at times on compounds where it seemed indicated that *this* is worth looking at, and that other things weren't worth looking at.

> **Tania:** Considering all of the years that you studied the neurotoxicity of entactogens, is there one drug that stands out, other than MDMA, that might be suitable for therapeutic use?

**Dave:** As an entactogen, probably MBDB. I'm still intrigued by the possibility that it could be useful as an adjunct to psychotherapy. For people who experimented with MDMA before it was a controlled substance, the thing that they said was that with MDMA, there's this grandiose euphoria that hits you. And MBDB doesn't really produce that.

With MBDB, there have been people who have taken it who have said, "You know, I didn't really notice *when* it started. It was just that all of a sudden, I realized that I was in, and *had been* in, this altered state of consciousness."

I think that if you're going to have a drug as an entactogenic psychotherapeutic agent, it ought to be one that drug-naive people could take *without* having any kind of an overwhelming experience.

## Aliens, Insectoids, and Elves!

When writing about spiritual matters, it is important to be upfront about one's biases from the start. I was raised without religion. My father was an atheist; my mother is agnostic. I can count on one hand the number of times that I went to church as a child. In my teens and early twenties, I became fascinated with studying world religions, looking for clues that might help me better understand my psychedelic experiences. Although I never adopted any specific religion, I resonate most with ideas from Hinduism. There was a time in my life when I probably believed in God, in the idea that humans have souls, and in the concept of karma. These days, I'm a die-hard agnostic and devil's advocate.

In this chapter, I'll largely avoid proposing personal theories regarding the origin or meaning of entity contact experiences. I have no idea what the truth of the matter is in these situations. Such experiences are powerful enough that they influenced paradigm shifts in some people who have had them. Speculation and debate about entity encounters have occurred over the years, and I've compiled a few interesting articles on the topic in the chapters that follow. Inclusion herein should not be interpreted to imply that I am promoting any particular ideas; I am not.

Throughout history, humanity has described contact with "others": angels, demons, spirits, elves, aliens, etc. A girl raised on tales of the Brothers Grimm may believe in faeries; a boy brought up on Edgar Allen Poe stories may believe in ghosts. Children of Hindu households may worship a pantheon of deities, while Muslim kids may bow to a single God. Staid atheists may be "born again" into Christianity. And so on. Individuals' ideas regarding the truth or "reality" of the existence of non-material beings, including gods or God, may change multiple times over the courses of their lives. Such beliefs can fade, disappear entirely, or be replaced by beliefs in the existence of other non-material beings.

Psychedelic plants have been employed for thousands of years as spiritual tools, due to the perception that they can provide an experience of non-material realms—be they heavenly, hellish, or anything in between. Traditional ethnographic use of these plants for such purposes inspired the coining of "entheogen", a word that means to "generate God within".1 It is not uncommon to hear stories of agnostics or atheists "finding God" during their psychedelic trips2, 3, 4, 5, 6 and subsequently changing their views on the reality of spiritual realms and beings. Direct experience can be mighty persuasive. Even if that experience takes place solely within a mental landscape. Even if one was on drugs at the time. Under the influence of psychoactive plants or drugs, users have reported experiences of watching, receiving messages from, communicating with, and/or interacting with "non-human intelligent beings", hereafter described as "discarnate entities".

from the forthcoming book — DMT UNDERGROUND: A COMPENDIUM OF UNAUTHORIZED RESEARCH

"No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded. How to regard them is the question—for they are so discontinuous with ordinary consciousness."

— William James The Varieties of Religious Experience (1902)

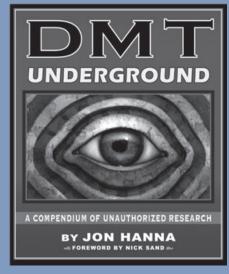
"You give DMT to ten people. They've never had DMT before, and you tell them only that they might see something. If nine out of ten of them come back with descriptions of elves, and four of them use the word elves unprompted, we think you should investigate the phenomenon of elves seen on DMT."

— Zarkov

"Coming Out of Left Field with Gracie and Zarkov", *High Frontiers* 3 (1987)

"The only appropriate attitude for man to have about the big questions is not the arrogant certitude that is the hallmark of religion, but doubt. Doubt is humble, and that's what man needs to be, considering that human history is just a litany of getting shit dead wrong."

> — Bill Maher Religulous (2008)



# Oh My!

#### **by JON HANNA**

For some, the word "discarnate" may solely evoke ghostly specters of indistinct form. Here, the word is used to describe perceived beings that do not have a physical body within consensus reality, yet often *do* have a form that gives an appearance of physicality. Those who perceive them may be able to describe what they look like and/or sound like, sometimes what they feel like, and on rare occasions even how they smell and/or taste. However, a video camera wouldn't be able to record images or audio of them. "Entities" conveys that for those who perceive them, they seem to be independent beings.

"Discarnate entities" should be considered to encompass angels and aliens, demons and dragons, faeries and felines, elves and insectoids, ghosts and goblins, harlequins and humanoids, plant teachers and other creatures—even morphing machine minds and fractalline Fabergé footballs, as long as they're non-physical and seem sentient.

In his 2001 book *DMT: The Spirit Molecule*, author Rick Strassman presents first-person accounts from subjects who participated in his DMT studies between 1990 and 1995. Over the course of his work during these years, Strassman was surprised to discover that "at least half" of his subjects experienced some manner of contact with:

..."entities," "beings," "aliens," "guides," and "helpers" [...]. The "life-forms" looked like clowns, reptiles, mantises, bees, spiders, cacti, and stick figures.<sup>7</sup> Although Strassman located brief mentions of entities in a couple of DMT reports from the scientific literature of the 1950s, he related that he had:

...been unable to locate any similar reports in research subjects taking other psychedelics. Only with DMT do people meet up with"them," with other beings in a nonmaterial world.<sup>7</sup>

Strassman's remarks seem odd, since visions of discarnate entities generated via numerous other psychedelics certainly aren't absent from writings in the field. In a chapter titled "The World of the Non-Human" from their 1966 book *The Varieties of Psychedelic Experience*, authors Robert Masters and Jean Houston describe such visions:

These images are usually seen with eyes closed [...]. They are almost always vividly colored and the colors typically are described as rich, brilliant, glowing, luminous, or "preternatural"—colors exceeding in their beauty anything the subject has ever seen before.

The images are most often of persons, animals, architecture, and landscapes. Strange creatures from legend, folklore, myth, and fairy tale appear in wonderful surroundings.<sup>8</sup>

Masters and Houston go on to provide several examples of specific visions; one was from a male subject



Invaders, by Naoto Hattori

who had consumed the peyote cactus (*Lophophora williamsii*):

A platinum snail about twelve feet high and studded with rubies was pulled along on its wheels by a much smaller and brightly painted dwarf carved from wood. The curious couple was closely followed by a host of metallic, gem-covered insects-grasshoppers and beetles, bumblebees, and mosquitoes, all of fabulous size and brilliantly gleaming, gliding or walking or hopping with the precision of wound-up toys. These then were followed by strange creatures from some wildly imaginative bestiaryall converging upon a lush oasis in the golden desert where the foliage seemed to have been created by Rousseau.8

Another example is presented from a four-year-old boy, "S", who had unwittingly consumed an LSD-dosed sugar cube from his mother's refrigerator:

Among the first hallucinations to appear were a number of crustaceans, especially (as it could be gathered) crabs and lobsters. [...]

#### **ART BY: NAOTO HATTORI • JASON WA TUCKER • VIBRATA CHROMODORIS**

S also hallucinated a whole array of "monsters"—apparently creatures such as elves, dwarfs, and other small, deformed human-like beings. Fearful at first, he gained confidence when his mother encouraged him to"make friends with the monsters" [...]. After some of his anxieties were disposed of, several of the"monsters" came and sat on S's knees and in the palm of his hand and he talked with them. Others danced around him and made faces. From time to time, S's fears would return; then, with his mother's help, he would overcome his fears again and enjoy playing and talking with the hallucinated beings.8

Masters and Houston compare this child's experience to that of philosopher Jean-Paul Sartre, who took mescaline under the supervision of a psychiatrist. At one point Sartre described that he was:

...fighting a losing battle with a devil fish and [he] mentioned a number of other disturbing experiences. He reported umbrellas changing into vultures and shoes changing into skeletons, faces became hideous, and crabs, polyps, and "grimacing things" that he saw from the corner of his eye.<sup>8</sup>

Even after the drug had worn off, some weeks later Sartre complained of being "on the edge of a chronic hallucinatory psychosis" and said that he was "being followed by lobsters and crabs" and "assorted other monsters".

Jerry Richardson, an insurance underwriter from San Francisco who participated in Bernard Aaronson's LSD research in the 1960s, wrote:

I saw goblins in green and yellow and blue; red devils with sinister, twisted faces; and then bodies, faces, ghostlike creatures in white, coming out of nowhere, rushing toward me, tumbling over each other, and disappearing into the back of my mind in a seemingly endless procession of ludicrously grotesque imagery. [...]

Opening my eyes stopped the mental imagery. Around the room,

everything was now bathed in a curious yellowish-warm, glowing radiance. An ordinarily rather nondescript, somewhat messy, and ugly room had been transformed into something out of a fairy tale.<sup>9</sup>

In his May 12, 1955, lecture "Mescaline and the 'Other World'", presented at the annual meeting of the American Psychiatric Association, Aldous Huxley commented on the discarnate entities that may populate humanity's mental geography:

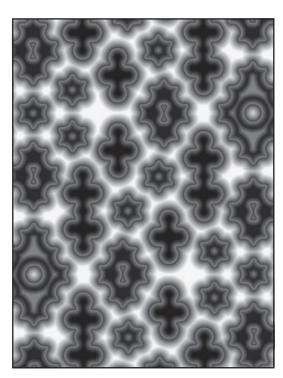
Through these landscapes and among these living architectures wander strange figures, sometimes of human beings (or even of what seem to be superhuman beings), sometimes of animals or fabulous monsters. Giving a straightforward prose description of what he used to see in his spontaneous visions, William Blake reports that he frequently saw beings, to whom he gave the name of Cherubim. These beings were a hundred and twenty feet high and were engaged (this is characteristic of the personages seen

in vision) in doing nothing that could be thought of as being symbolic or dramatic. In this respect the inhabitants of the mind's Antipodes differ from the figures inhabiting Jung's archetypal world; for they have nothing to do either with the personal history of the visionary, or even with the age-old problems of the human race. Quite literally, they are the inhabitants of "the Other World".

This brings me to a very interesting and, I believe, significant point. The visionary experience, whether spontaneous or induced by drugs, hypnosis or any other means, bears a striking resemblance to "the Other World," as we find it described in the various traditions of religion and folklore. In every culture the abode of the gods and souls in bliss is a country of surpassing beauty, glowing with color, bathed in intense light. In this country are seen buildings of indescribable magnificence, and its inhabitants are fabulous creatures, like the six-winged seraphs of Hebrew tradition, or like the winged bulls, the hawk-headed men, the human-headed lions, the many-armed, or elephant-headed personages of Egyptian, Babylonian and Indian mythology. Among these fabulous creatures move superhuman angels and spirits, who never do anything, but merely enjoy the beatific vision.<sup>10</sup>

John Lilly, the famous dolphin researcher and inventor of the isolation tank, recounts his first LSD experience:

I saw God on a tall throne as a giant, wise, ancient Man. He was surrounded by angel choruses,



D.MentiTies, by Vibrata Chromodoris

cherubim, and seraphim, the saints were moving by his throne in a stately procession. I was there in Heaven, worshiping God, worshiping the angels, worshiping the saints in full and complete transport of religious ecstasy. 11

In later experiences, both aided and unaided by drug consumption, Lilly contacted a pair of discarnate entities who told him that they were his guardians and who appeared to give him some instruction on the nature of the universe. In contemplating these experiences, Lilly remarked:

In my own far-out experiences in the isolation tank with LSD and in my close brushes with death I have come upon the two guides. These two guides may be two aspects of my own functioning at the supraself level. They may be entities in other spaces, other universes than our consensus reality. They may be helpful constructs, helpful concepts that I use for my own future evolution. They may be representatives of an esoteric hidden school. They may be concepts functioning in my own human biocomputer at the supraspecies level. They may be members of a civilization a hundred thousand years or so ahead of ours. They may be a tuning in on two networks of communication of a civilization way beyond ours, which is radiating information throughout the galaxy.<sup>11</sup>

During some of Lilly's later experiences, under the influence of the drug ketamine, he believed himself to be communicating with discarnate entities who shared with him knowledge about humanity's future - a time when the planet would be taken over by a malevolent "solid-state entity". In an interview on May 14, 1998, ketamine research Karl Jansen asked the 83-year-old Lilly about his contacts with entities:

Jansen: Many persons do not

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ketamine, or coincidence control officers. How do you explain this in terms of your theories?

Lilly: You don't have to have any concept of Beings. When you take the drug you enter into their consciousness. You don't have to see them or know them as Beings. They engage your mind. Before matter, energy, there was consciousness without an object. Out of that came Beings.12

Over his lifetime as an author and lecturer, Terence McKenna often discussed the topic of entity contact in conjunction with the mental effects of high doses (five grams) of psilocybincontaining mushrooms:

Yes, first come the dancing mice, the little candies, the colored grids, and so-forth and so-on. But what eventually happens, quickly, like ten minutes later, is there is an entity in the trance, in the vision. There is a mind there, waiting, that speaks good English, and invites you up into its room. [...] And what it is, is it's a voice in the head [...]. I come into a place. It's hard to describe. It's a feeling. And the content of the feeling is, "now the elves are near." But they won't appear unless I invoke them.13

How often do psychonauts see or interact with entities? Within the framework of documenting the kind and frequency of "religious" images that occurred among their 206 subjects, Masters and Houston reported that 58% saw figures such as Christ, the Buddha, saints, godly figures, and William Blaketype figures, while 49% saw devils and demons, and 7% saw angels.8

#### My Own Entity Encounters

The topic of psychedelic-induced "contact" has interested me since 1987, when I had my own initial discarnate entity encounter while on a couple hits of LSD. I was attending college in Stratford-upon-Avon via a program run through San Francisco City College, where I'd been studying art. As strange chance would have it, I happened to run into a friend from SF who was passing through England on his way to Germany. He slipped me two gel-tabs. One night I dropped both tabs and went out walking with a few new friends from school. Lacking any foreknowledge of how my companions felt about illicit drug use, I kept the fact that I was tripping to myself. The acid came on, and I was enjoying our walk and discussions, during which it came out that one of the women with us was a practicing Wiccan. After we turned down an old deserted Roman road, our group fell quiet for a moment. It was late in the evening, and the only sound was the crunching autumn leaves beneath our feet. As we walked, a wind blew down the road, releasing more leaves from the trees and whirling them into a sort of tunnel above our heads. The Wiccan woman began to sing in Gaelic-a language that I'd never heard before. Despite the fact that I couldn't understand the words, the minor tones of her song were hauntingly beautiful. At the first note she sang, some of the airborne leaves transformed into about a dozen faeries-exactly the sort of traditional winged pixie-like creatures painted by the artist Brian Froud. I had never seen anything like this before on acid. While luminous and sparkly, they appeared quite solid and each seemed to have an independent existence, as they playfully darted amongst the swirling leaves. It was truly magical. I was transfixed. As the final note of my friend's song sounded, I watched all the faeries morph back into wind-blown leaves. Being the only one of us on acid at the time (to the best of my knowledge), I presumed that no one else had experienced the profoundly moving vision that I had seen. Our group remained respectfully quiet for a moment. Then someone asked our vocalist the name of the song that she'd just sung, and she replied, "Oh, that one is known as 'The Song to Call in the Faeries'."

About a decade later, I was camping with three friends at Island Lake near Nevada City, California. A couple of us decided to take "heroic" doses of Psilocybe mushrooms one evening. I chewed down four grams, retired to my tent, closed my eyes, and got horizontal on my air mattress. As the effects of the 'shrooms came on, my inner vision revealed what looked like a dank moss-green hospital emergency waiting room. I seemed to be sitting on a bench in this room, and it occurred to me that it was odd that there were no patients being wheeled in or out. Kinda quiet for an ER. After some time, I noticed a few off-white football-sized larvae floating three or four feet off the ground in various spots. Following one of these with my eyes, I then saw an insectoid entity about the size of a small

Indeed, the diversity of "beings" encountered in DMT space leads one to think that everyone can't *really* be describing the same "creatures"...

dog, whose back was facing me. It had a long mosquito-like proboscis that I could only partially see. Suddenly, it turned, and-realizing that I saw it-it made a high-pitched buzzing/shrieking sound. (I got the impression that it was sending out a warning alarm.) The entity then initiated telepathic communication with me, explaining that it was quite surprised that I could see it, as this usually didn't occur. It said that it lived by extracting human thought/emotion. Human thoughts were both the currency of its species, as well as their sustenance/ energy source. (The needle-like proboscis was looking less friendly by the minute.) I was given the impression that-as the coin of its kind-different types of thought/emotion were valued differently; those with a more intense energy charge, such as fear or love, were worth more. The entity explained that it existed in another dimension so that it could feed off of human thought unhindered. (I got a feeling that the relationship wasn't symbiotic; perhaps these "thought drainers" somehow suck life energy from humans, along with the mental energy.) It claimed that it was the psychic equivalent of an actual insect that feeds on blood, skin, etc., with regard to the extent of any damage it might do to those on whom it fed. Yet I had a nagging feeling that it might not be telling me the whole truth. Maybe these creatures had some influence on inciting wars or disasters in the human realm? The experience left me feeling unsettled for some time afterwards.

Moving even further into unpleasant entity contact realms, there was my one (and only) trip on 3 mg of DOB (2,5dimethoxy-4-bromoamphetamine). I was attending Burning Man, where my wife and I had pitched our tent near a camp called Disturbia. In retrospect, the camp's name should have been a

sign that this might not be the right place to first try a potent phenethylamine that can last up to 24 hours. The Disturbia folks had kindly set up a loudly amplified theremin for public

use. The theremin is an electronic musical instrument that is played by bringing one's hands into varying proximity to its metal antennas without actually touching them. Manipulated by a novice (and, well, everyone on the playa appeared to be new to the instrument), it sounds like a beehive in a slinky. It was approximately right after the DOB had fully kicked in that I became aware of the theremin, when someone started "playing" it, thereby attracting more folks who wanted to "play" it - for hours on end. It was bumming me out. At one point, when my wife could tell that I was not doing so well, she tried to comfort me by saying, "I'm here, honey. Just focus on me, and you'll be okay." As I looked into the eyes of the person I love most in the world, I watched cockroaches crawl out from under her eyelids and swarm over her face. Buoyed by the buzzing theremin, the "bug" theme continued. I was confronted by several human-sized chitinous Gigeresque entities that spent the rest of the evening probing me and performing invasive "physical" experiments on my immobile, unhappy body. It was pretty much the classic alien abduction scenario, sans space ship. After a long night, there was at least a beautiful (and quiet!) sunrise the next morning.

Most of my psychedelic experiences over the past three decades have not featured any manner of discarnate entity contact. In New Orleans, I got a weird ghostly dwarf thing once on the combination of psilocybin-containing mushrooms and Peganum harmala. Nitrous oxide revealed dimensional doppelgangers and WALL-E-style robots. Ketamine has ponied up a pygmy shaman, proto-human ape-like creatures, and some tentacled cephalopods. DPT (dipropyltryptamine) has provided tiny cartoon-like insectoid creatures. Once on the combination of ketamine and DPT, I witnessed two distinctly different discarnate entities seemingly thrust into each others' realms for the first time. Both of these aliens were infused with a bad-ass attitude reminiscent of denizens of the Mos Eisley Cantina in Star Wars. They brokered a deal-one of them passing a small unidentifiable item into the other's hand while mentally shooting me a warning that I had fuck-all idea of what I was dealing with-and I was left with the strong impression that I should consider myself lucky that they let me off the hook, since it was my chemical cocktail that had drawn the three of us together in the first place. On 2C-B, I've also sometimes encountered small insectoids. On ayahuasca, I've gotten large insectoids. And yes, on smoked DMT, I've entered the trans-linguistic alien dimension populated by McKenna's mercurial and mischievous mutating machine elves. (A realm well-captured by the artists Naoto Hattori, JWA Tucker and Vibrata Chromodoris.) According to McKenna:

It is true, that when you smoke DMT, for example, in a sufficiently high and prepared dose, you get elves everybody does. All you need do, is inhale deeply three times, and you know... You want contact? You want elves? You want alien intelligence? You'll have that up the kazoo.<sup>14</sup>

For some who've seen DMT elves, the beings looked similar to traditional fairyland creatures. But many users describe them differently. Indeed, the diversity of "beings" encountered in DMT space leads one to think that everyone can't *really* be describing the same "creatures", and that the space must be populated with a multitude of discarnate entities: typical sci-fi extraterrestrials, humanoids, jellyfish, insectoids, clowns/Pierrots, reptilians, robots, octopods, and other sorts of beings have been mentioned. Author D.M. Turner had apparently catalogued at least nine distinct types of entities that he'd encountered. In discussing these with a fellow DMT psychonaut, Turner found that his friend had experience four of the exact same entities, plus two others that Turner had never seen.<sup>15</sup> With rigorous review, one might create a Bestiarum Vocabulum, charting which entities appear, and with what frequency, in response to the consumption of various psychedelics.

McKenna was gifted at painting a picture of the DMT entities and proposing theories about what they might mean:

Trying to describe them isn't easy. On one level I call them selftransforming machine elves; half machine, half elf. They are also like self-dribbling jeweled basketballs, about half that volume, and they move very quickly and change. And they are, somehow, awaiting. When you burst into this space, there's a cheer! Pink Floyd has a song, "The Gnomes Have Learned a New Way to Say Hooray." Then they come forward and tell you, "Do not give way to amazement. Do not abandon yourself." You're amazingly astonished. The most conservative explanation for these elves, since these things are speaking English and are intelligent, is that they're some kind of human beings. They're obviously not like you and me, so they're either the prenatal or postmortal phase of human existence, or maybe both [...].

They are teaching something. Theirs is a higher dimensional language that condenses as a visible syntax. For us, syntax is the structure of meaning; meaning is something heard or felt. In this world, syntax is something you see. There, the boundless meanings of language cause it to overflow the normal audio channels and enter the visual channels. They come bouncing, hopping toward you, and then it's like—all this is metaphor; they don't have arms-it's as though they reach into their intestines and offer you something. They offer you an object so beautiful, so intricately wrought, so something else that cannot be said in English, that just gazing on this thing, you realize such an object is impossible. The best comparison is Faberge eggs. [...]

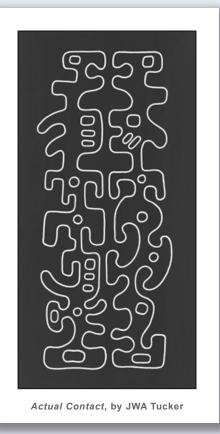
The archetype of DMT is the three-ring circus. The circus is all bright lights, ladies in spangled costumes, and wild animals. But right underneath, it's some fairly dark expression of Eros and freaks and unrootedness and mystery. DMT is the quintessence of that archetype. The drug is trying to tell us the true nature of the game. Reality is a theatrical illusion.<sup>16</sup>

In his pioneering article "Apparent Communication with Discarnate Entities Induced by Dimethytryptamine (DMT)",<sup>17</sup> author Peter Meyer presents a number of possible theories regarding the true nature of these experiences. In November 1989, a year before Strassman obtained final government approval to start his DMT studies, Meyer sent a draft of his article to Strassman, sparking a discussion of the topic of communication with the alien DMT entities that some people have reported from their visions.

In his response, Strassman agreed that assessing the significance of "alien communication" was important, noting:

I've interviewed about 15 people who have smoked DMT, and have found several who describe "alien contact." I'm not quite sure what to make of such reports.<sup>18</sup>

While Strassman felt that the phenomenon needed much closer investigation, in a follow-up letter, he remarked:



With respect to the alien contact phenomenon, I do wonder about the power of suggestion. McKenna's ideas have been so widely promulgated that it's hard to find someone who hasn't heard of him or his ideas before smoking DMT. On the other hand, there are many who know McKenna and his ideas well, have smoked a lot of DMT many times, and have had no alien contact experiences.<sup>18</sup>

On the surface, it is easy to agree with Strassman's sentiment. McKenna's comment, "you get elves—everybody does", is clearly *not* a universal truth, as evidenced by the following dialogue about the DMT experience between comedian/actor Joe Rogan and author Daniel Pinchbeck:

**Rogan:** Describing it in words always feels so fake. It's like, there's no *words* that have been invented that are going to describe that experience, you know? **Pinchbeck:** You didn't like "hypertransforming machine elves"?

**Rogan:** It wasn't *like* that to me, you know...

**Pinchbeck:** It wasn't like that to me, either.

**Rogan:** I heard [them say] some things that McKenna said, like, "look at this". They say, "look at this" a lot. And I heard them say, "Don't give in to astonishment". But I was wondering, is that because I *knew* that McKenna [had] said that, and...

**Pinchbeck:** Right, right, right. He set the template. [...]

Rogan: But it didn't seem to me to be like hyper... what did he call them, uhm... self-transforming machine elves. [...] They didn't seem like elves to me. It seemed like... what I always describe them as is these complex geometric patterns that are made out of love. That's how I describe them, you know. And that means nothing. Those are just a bunch of words. You know what I mean? It's just like, I try to say it in a way that's interesting and funny. But you know, [in] reality, what is it? There's just some incredible patterns that you can't even *really* look at. It's like they're too beautiful to take in, and they're changing all the time.<sup>19</sup>

I've known numerous people who have never experienced any sort of contact with discarnate entities from smoking DMT. While I don't know how familiar these people were with McKenna's descriptions of the experience, by the late 1980s, I had certainly come across mentions of "DMT entities". It is indeed hard to imagine that many of the "required-to-have-been-experiencedwith-psychedelics" subjects volunteering to take DMT in Strassman's studies wouldn't have already been aware of the "elf phenomenon" that had been—as Strassman characterized it-"so widely promulgated" by that time. And these days, with ubiquitous Internet access, it

seems increasingly unlikely that a DMT user would never have heard sound bites of McKenna on the topic. The belief that McKenna's ideas have either directly or indirectly affected the kinds of visions that people have, in any case, seems fairly common.

However, after Strassman actually began administering DMT in late 1990, he changed his mind about the scope of awareness of Terence McKenna's ideas and the power of suggestion as factors influencing reports of discarnate entities among his research subjects:

[...] volunteers were uniformly shy and uncomfortable discussing their strange being encounters. Neither were Terence McKenna's lectures and writings especially popular when we first started hearing these unusual reports from our research subjects. I often asked volunteers about being familiar with popular accounts of DMT-mediated encounters with elves or insectoid aliens. Few if any were. Thus, I don't think these reports were a type of mass hysteria or a self-fulfilling prophecy.<sup>7</sup>

In *DMT: The Spirit Molecule*, Strassman presents a number of intriguing speculations regarding the origin and meaning of discarnate entities.

In discussing entity contact, Masters and Houston remarked that, "The hallucinated monsters are the monsters of childhood, the forms fear takes when one regresses to feelings of childlike helplessness."<sup>8</sup> Within that context, consider the following DMT trip report:

[...] I arrive in a place filled with intense white light where hideous, bodiless, pointed-eared, purple and green entities bound toward me and they laugh, jeer and ridicule me; where these grotesque elf, joker or clown-like caricatures rush at me one at a time and in clusters; where they curl their hideous, clown-like mouths and wag their tongues in my face; where I relive every real and imagined humiliation I suffered in childhood; where a great sorrow and disappointment fills me as they come at me faster and faster; where I start to crumble under their onslaught, so I open my eyes but still they come; where I realize I have to face them, so I close my eyes and focus on my breathing, and the demonic forces back off [...].<sup>20</sup>

Psychedelic researchers Bernard Aaronson and Humphry Osmond have stated that these drugs "make available exotic and forbidden landscapes. In these landscapes, the images of nightmare from which we have fled since childhood, move and take shape."21 If true, this could go some way toward explaining the current preponderance of visions featuring extraterrestrial beings and advanced technology. Since the 1980s, the scare stories from fairylands have been solidly supplemented with alien abductions and tales of Transformers. Science fiction is widely accepted as a more plausible genre than fantasy. Contemporary society's fears have been captured in movies such as the Alien series (1979–2012), They Live (1988), The Lawnmower Man (1992), eXistenZ (1999), The Matrix series (1999-2003), and TV shows such as Doctor Who (1963-2013) and The X-Files (1993 - 2002).

Several times, Strassman mentions a "nursery/playroom theme" brought up by his research subjects,<sup>7</sup> and spring-loaded wind-up toys such as the perennially popular Jack-in-the-box may contribute to the common childhood fear of clowns.

Fear of arthropods (arachnids, crustaceans, and insects) is widespread, and understandable on a variety of levels. From the warm-blooded perspective of fuzzy mammals, arthropods seem hard, cold, unfeeling, parasitic, robotic, and alien. A universal symbol for death is the human skull-all that's left when the tissue reflecting each of our unique lives has been stripped away. With their fleshless exoskeletons, arthropods inherently carry an intimation of death so fear-inducing to some humans that their gut reaction on seeing a spider, an ant, or some other small arthropod, is to smash and kill it. Beyond their symbolic "otherness", we have a long history of fighting them off of the crops

we've cultivated for food, clothing, and shelter. Our species' battle against arthropods is *so* prevalent that we've come to refer to any small, potentially damaging microorganism (such as a virus or bacteria) as a "bug"—our common name for tiny arthropods. Cold-blooded reptilians and cephalopods are also very "other" to us, so the appearance of discarnate entities resembling such life forms wouldn't be surprising as additional "forms fear takes".

Yet fears aren't the only visionary inspiration to shockingly explode in our mind fields; mental geography is a complex, fractal, holographic space where unconscious "memory" continually serves up amazing realities on the fly. We commonly believe that we see the world as it exists, but-in reality-many of our perceptions of "the world out there" are just approximations filled in from our mind's unconscious memory. The "double take", a shift in perception based on the flip from a "fill in" to a more accurate perception of external reality (or vice versa), can happen with any of our five senses.

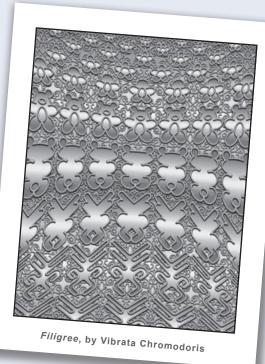
Consider the viewpoint expressed in "Virtuality" by Teafaerie, wherein she proposes a possibility for her DMT visions that is "simultaneously the most boring and the most exciting explanation" that she could come up with:

The mind is absolutely dripping with untold processing power, and it can instantly generate a full-scale masterwork alien spaceship from scratch, complete with all the trimmings. It can furthermore simultaneously create and animate a number of fully interactive non-player characters, who are often described as possessing an uncannily intense sense of "presence" (whatever that means). In this model, my amazing brain can do all this while very powerful drugs are scrambling the bejesus out of it, and it can do it without any awareness or deliberation on the part of the hopelessly unsophisticated frontman program that plays the role of the astonished psychonaut. On the surface this one sounds like the most parsimonious hypothesis, and I tend to return to this view in the long intervals between big trips. It's not all that different from dreaming, I reason, and I don't have too much trouble believing that my unconscious mind designs most of my dreams. I always end up denouncing this viewpoint from on high, though; somewhere I think that I actually have a recording of myself saying something like, "I'm looking at this stuff right now and I'm TELLING you that there is no...possible... way...that the person who I think of as myself could ever in a million years be generating all of this content this fast. That would be like saying that I could produce all of the most amazing art in the entire world in every single millisecond without even thinking about it..."22

#### What is mind? No matter... What is matter? Never mind.

By definition, discarnate entities have no physical bodies. Could this mean that they are only able to exist within minds? Is it possible for several discrete intelligences to inhabit a single brain? Can mind(s) exist without matter? Does curiosity collapse probability into actuality, materializing the meat of the matter, seeding a substrate, creating consciousness, promulgating the paradoxical process, forever and ever, amen? Bootstrapping at its best? Chicken and egg? I have no answers to such questions. Yet my agnosticism doesn't negatively impact my wonder, amazement, and fascination with the experience of discarnate entitieswhether they are only mental or whether they have some external, other-dimensional, or spiritual basis.

Terence McKenna seemed inclined to believe that DMT space is an independent reality populated with intelligent discarnate entities. Peter Meyer appears to have also come to this conclusion. He feels that his collection of 340 DMT Trip Reports provides objective evidence of



the existence of entities "within what seems to be an alternate reality."<sup>23</sup> Early in the DMT dialogue, Meyer proposed that DMT may provide access to a post-death realm.<sup>17</sup> Of the 340 reports that he's collected, he has marked 226 of them (66.5%) with an "entities" tag, due to their mentions of "experience of one or more apparently independentlyexisting beings which interact in an apparently intelligent and intentional way with the observer."<sup>23</sup> Meyer suggests that folks should read ten reports each day, think about them, and at the end of 34 days reflect on what his collection of first-person accounts implies about the nature of reality. This excellent exercise may result in raised eyebrows from at least a few skeptics.

#### Yourself, his ET... The elf is yours!

While some of those who "are experienced" lean toward the "external existence" viewpoint, others find such a perspective illogical and frustrating.

Consider Martin Ball's screed, "Terence on DMT: An Entheological Analysis of McKenna's Experiences in the Tryptamine Mirror of the Self", published by *Reality Sandwich*. Ball's rant against McKenna—as a flawed individual and as the promoter of flawed ideas-is largely a conglomeration of insults, straw-man arguments, and ironic egotism. (Ball's dogmatic refrain focuses on projections of McKenna's ego, painfully oblivious to those of his own.) Despite dismal dialectic, Ball brings up a couple of points worth thinking about. The first is that "all contents of entheogenic experiences are projections of the self" [emphasis in the original].<sup>24</sup> (Ball's remark might win over more supporters if it were expressed as "all contents of entheogenic experiences could be projections of the self". I'll refer Ball to the Bill Maher quote above, "Doubt is humble.") The second

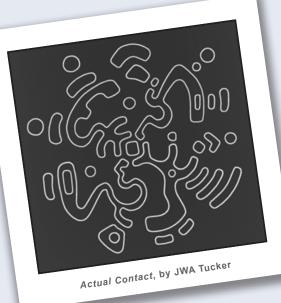
point worth contemplating, brought up by Ball only in passing, is his total dismissal of the concept of a "soul". In a world where some entheogen evangelists would like nothing better than to set their iPhone alarms for the final 8:12 p.m. sunset and fly off through DMT-induced double rainbows on their winged unicorns, Ball's monism is, at least, a refreshing alternative perspective.

In "The Case Against DMT Elves",<sup>25</sup> James Kent presents a neurologically based theory regarding the origin of discarnate entities. Kent proposes that these experiences are a product of individual human minds, rather

than an interaction with independent external intelligences. However, Kent backpedals a bit, claiming that, "The 'Gaia consciousness' that infuses the experience is undeniable," and entertaining the possibility "that this ancient plant consciousness actually exists and is attempting to make itself known through the DMT-enlightened mammal brain." He later states, "I also believe in samsara [reincarnation] and the transmigration of souls, which makes the notion that these entities could be 'disembodied souls' floating around in hyperspace very tempting to latch onto." I'm not sure why a theoretical external "plant consciousness" rates as being any more plausible than a theoretical external "elf consciousness", and within my own discarnate entity

encounters I have never experienced anything remotely describable as a "Gaia consciousness" (although I recognize that *some* other people have reported this). But I wholeheartedly agree with Kent's later remark that "none of [what any entities have said to me] points definitively to any deeper truth about what they are or where they come from."

Setting aside speculations regarding "what they are or where they come from", a more accessible question may be: How often are entity contact experiences the result of any *particular* psychedelic?



#### More Entities on DMT?

Clearly, Strassman's statement that this phenomenon *only* occurs with DMT is not accurate. In addition to the few examples provided above, contemporary trip reports published in print<sup>26, 27, 28</sup> and in numerous places online,<sup>29</sup> bear testament to the fact that this is not solely a phenomenon that occurs with DMT consumption. But is DMT *more* likely to generate such experiences than other psychedelics?

Strassman stated that at least 30 out of his 60 subjects reported having such experiences.<sup>7</sup> Meyer says that 266 of the 340 DMT trip reports he collected mention some manner of discarnate entities.<sup>23</sup> Together, these two sources suggest that perhaps 50–66.5% of those who consume DMT may experience discarnate entity contact. This falls roughly in line with the 49-58% that Masters and Houston reported<sup>8</sup> as having had visions of devils, demons, Christ, the Buddha, saints, godly figures, and William Blake-type figures. However, the Masters and Houston percentage range can't be compared directly to Strassman's or Meyer's percentages for two reasons. First, with a narrower focus on specifically religious entities, the Masters and Houston figure may be slightly lower than it would have been if they had also included other categories of beings. Second, Masters and Houston lump all 206 users of psychedelics together in one group, with no distinction made based on what specific chemical each of them consumed. Presumably at least some of their subjects had their entity experiences as a result of DMT consumption. (Indeed, in one such report included in their book, the DMT user describes encountering "the face of God" as that "of a very wise monkey!"8) Without access to more details from Masters and Houston's data, it is not possible to know how many of their 206 respondents experienced entities while under the effects of DMT and how many of them experienced entities after taking other psychedelics.

In order to solicit input from "seasoned heads" for this chapter, a handful of people were directed to an online survey. Participation was anonymous, and about half of the people who were contacted responded. Potential participants were believed to either (1) have a solid amount of personal experience with DMT, and/ or (2) have "sat" for others experiencing DMT trips. Eight people completed the survey. All of them answered "yes" to the question of whether or not they had ever experienced anything that seemed like contact with a discarnate entity. However, one potential participant, who declined to fill out the survey, did offer:

I saw all sorts of things in my trips: dancing skeletons, jaguar priestesses, bee aliens, dancing rats, cartoon characters, and so on, for many years. I never thought of them as "discarnate entities"; they

were just hallucinations. Then I heard Terence McKenna and began looking for "discarnate entities" in my trips. And suddenly, I began seeing "discarnate entities" instead of hallucinations. My point is, humans are so suggestible, they will believe of their hallucinations whatever you tell them to expect. If I am expecting cartoons, I see cartoon characters. If I am expecting "discarnate entities", then suddenly those cartoon characters have more "meaning" or "value" because I call them"entities"instead of"cartoons". In other words, Terence was a master of semantic bullshit.

To preserve anonymity, questions about gender and age were not included on this survey. Respondents expressed a variety of spiritual beliefs, including atheism.

Responses to a question about approximately how many times they had experienced entity contact ranged from 2 to more than 100. Year of first contact experience ranged 46 years, from 1961 to 2007. Four people's first contact resulted from DMT, one from LSD, one from psilocybin-containing mushrooms, another from mushrooms in combination with *Peganum harmala*, and the final person's occurred at age four closely following a head trauma.

When asked to name any substances that had resulted in entity contact experiences, the following drugs were mentioned (number of mentions indicated in brackets): DMT [7], ayahuasca [6], psilocybin-containing mushrooms [5], mescaline [2], and Salvia divinorum [2]; 5-MeO-DMT, Brugmansia, Cannabis, ketamine, LSD, nitrous oxide, psilocybin-containing mushrooms with Peganum harmala, S. divinorum, and P. harmala were all mentioned a single time.

The number of times each respondent had smoked/vaporized/injected DMT ranged from "maybe 6" to "probably less than a thousand". Respondents were also asked how many times they had introduced others to smoked/vaporized/ injected DMT; three of the eight answered in the 3–5 range, two answers were in the hundreds, and the rest fell in the middle. When asked how many of the people that they had turned on to DMT had mentioned some manner of "discarnate entities", the answers were: 1%, somewhere less than 10%, 15%, 30-40%, 50%, 75%, 75%, and there was one non-response.

Several questions were asked regarding the possible external reality of discarnate entities. Expressing an opinion shared by a few people, one respondent answered:

It's made me question my rational, scientific worldview; I had to admit that there's much we don't know about these questions; an open mind is needed without abandoning critical thinking.

Echoing the remark of the person who declined to complete the survey, another respondent asked:

What is meant by "entity" and how is that defined? I've met people for whom all voices in their head belong to someone or something else and for whom almost anything they see after using DMT is a McKennaesque entity. Mainly because they read McKenna telling them that this is what [one sees] when [one smokes] DMT. [...] For me to think of something as an"entity" there has to be a clear sense of "other" and a clear sense of it being something fully conscious and interactive.

It is clear that different people will have differing standards for what constitutes contact with discarnate entities.

Among the responses to this tiny survey, DMT and ayahuasca were most often associated with entity contact experiences, followed closely by psilocybin-containing mushrooms, with mescaline and *Salvia divinorum* trailing.

#### A Larger Data Set

In the Erowid Experience Vaults, entity contact is associated with nearly a hundred different substances, although over half of those substances have only one or two entity-related reports.

The total number of reports for any given substance may, to an extent, represent that substance's popularity (and availability). However, it is reasonable to presume that people are more likely to be inspired to write experience reports following a powerful experience than they are following a mundane one. For example, there are a large number of daily tobacco smokers, but only a small number of tobacco reports on Erowid. No one would suggest that LSD is consumed by ten times the number of people who use tobacco, despite the fact that the Experience Vaults contain ten times more LSD reports than tobacco reports. At the time this chapter was written, the five drugs with the largest number of experience reports written about them were psilocybin-containing mushrooms, Cannabis, Salvia divinorum, MDMA, and LSD.

As of mid-October 2012, there were 22,640 published experience reports on Erowid. Of these, 1,159 were categorized by Erowid as mentioning Entities/Beings (representing about 5% of all reports).

Correlating the use of any individual psychoactive drug to entity experiences within the Vaults immediately runs into a challenge: psychonauts often consume more than one drug at a time. Common "add on" drugs-such as Cannabis, alcohol, tobacco, and caffeine-may not be terribly contributive to many entity experiences. But what about an entity experience that occurred while under the influence of psilocybin-containing mushrooms, methoxetamine, and 4-hydroxy-N,N-ethyl-methyltryptamine? Or one induced by nitrous oxide, Salvia divinorum, and 5-MeO-DMT? Or MDMA, dextromethorphan, GHB, cocaine, and mushrooms (plus, of course, *Cannabis* and alcohol)?

When examining experience reports for mentions of entity contact, those categorized as involving more than a single substance were excluded. Because of their similar chemistry, reports for *Brugmansia* and *Datura* species were combined. The number of single-substance reports for each of the ten substances that were analyzed ranged from approximately 150 to approximately 1,300. These substances, sorted by the number of reports mentioning entities [noted in brackets], are: *Salvia divinorum* [314], DMT [76], *Brugmansia/Datura* [74], psilocybin-containing mushrooms [68], ayahuasca [66], LSD [25], mescaline-containing cacti [16], diphenhydramine [15], ketamine [14], and dimenhydrinate [11].

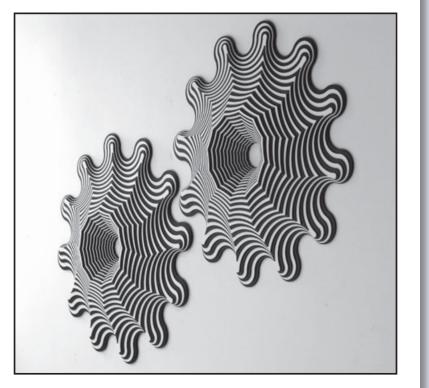
Dividing the number of entity contact reports for a given substance by the total number of reports for that substance provides a rough estimate of the frequency of entity contact by substance: DMT [38%], ayahuasca [36%], *Brugmansia/Datura* [29%], *Salvia divinorum* [25%], mescalinecontaining cacti [10%], diphenhydramine [9%], ketamine [9%], dimenhydrinate [7%], psilocybin-containing mushrooms [5%], and LSD [3%].

There are limitations to any interpretation of this data. People may be more inclined to write about their DMT experiences, because the effects are both powerful and short. After a grueling voyage on DOB, for example, one may be less inspired to sit down and write a novel about what one went through. Also, entity contact may play a smaller part in a longer psychedelic trip, and it could be that—for the psychonaut—other aspects from their experience seemed more important to record. There are also certainly publication biases; reports with particular keywords or for particular substances may be published sooner than others, or Erowid reviewers may be more likely to focus on topics that they personally find interesting.

#### Surveying Erowid Visitors

To gain another perspective on the subject of entity contact, I ran three short surveys on Erowid.org.

All three surveys asked for gender and age. After removing invalid responses, there was a variation of 3% or less between surveys: 84% of respondents were male and 15% were female, with 1% transgender. The age ranges were: 18–22 [47%], 23–29 [23%], 15–17 [14%], 30–39 [9%], and 40–79 [7%]. As gender and age were fairly consistent from survey to survey, one might envision the average respondent as a male 18–29 years old, who has computer access and an interest in psychoactive drugs. Right off the bat, this provides an



Existengine, by Vibrata Chromodoris

identifiable bias regarding the data generated: Respondents are from a specific niche that does not represent the general population, though the demographics are consistent with the demographics seen in several previous surveys on Erowid.org.

The idea with Survey #1 was to see how often entity contact is reported for a few well-known psychoactive drugs. The first question was, "Have you ever (sober, high, or in any state) experienced contact with a non-human, intelligent, discarnate entity (angel, faerie, alien, spirit)?" This allowed respondents to indicate how often any such contact might have occurred. The second question offered the choice of eight specific drugs that the respondent might have been on when the entity contact happened; respondents could also select "other drug", "multiple substances", "multiple occasions with different substances", "no drug/sober", "don't know/not sure", or "prefer not to answer". A final question asked about the respondent's religious inclination.

Among 4,910 valid responses, nearly 37% reported having had contact with discarnate entities, while slightly over 8% said that they didn't know or weren't sure whether they had experiences that would qualify. Atheists and agnostics were more likely to report "never" having had an entity contact, whereas the highest percentage of entity contact was reported among people who gave their religious inclination as "other mystical/spiritual".

Of those who reported having had an entity encounter (either sober or after having taken a drug), and given the option of eight drugs to select from as the drug they may have been on when entity contact occurred, respondents reported: DMT [11.7%], psilocybin-containing mushrooms [9.8%], LSD [9.0%], Salvia divinorum [7.4%], Cannabis [5.7%], ayahuasca [1.5%], ketamine [1.1%], mescaline [0.6%], other drug [9.5%]. Additionally, 15.4% reported they were sober during the experience, 20% said that their experiences happened on multiple occasions with different substances, and 8.4% reported an experience while on multiple substances.

One immediate challenge to this survey is that the results don't take

into consideration how common use of any given substance is among the group being surveyed. Ayahuasca, for example, is widely reported to occasion entity contact. A recent study of 131 North American ayahuasca users, who had a combined total of over 2,267 sessions, found that 74% believed that they had a personal relationship with "the spirit of ayahuasca", which was "most often described as a wise teacher, grandmother or healer from a higher spiritual dimension and intelligence"; some ayahuasca users also reported a "belief in the sentience in plants and in spirit entities from other realities."30 Yet because of its relative rarity, only 1.5% of those reporting an entity contact experience in Survey #1 mentioned ayahuasca as an inspiration for that contact. At the same time, the propensity for Cannabis to induce contact with discarnate entities is undoubtedly fairly low, while it certainly has to be the single most-used drug of those that the survey mentioned. Therefore, the 5.7% figure for Cannabis is at least partially the result of a vastly larger number of users and drug exposures than for ayahuasca.

Survey #2 sought more information about which of the above-mentioned drugs are more popular among Erowid users. Of 11,464 valid responses, 96% had used Cannabis, 70% mushrooms, 60% LSD, 28% DMT, 26% ketamine, 17% mescaline, and 6% had used ayahuasca. This survey also asked the approximate numbers of use instances for each of these substances. For example, Cannabis users, who represented around 96% of respondents, were most likely to report (48.6%) that they had used it "1,000 or more" times; whereas only 6% of respondents reported having ever tried ayahuasca and, of those, half said that they had used it a single time, and about a third "2-5 times". With DMT, there were 1,067 people [9.3%] who said that they had used it "once", 1,203 people [10.5%] who said they had used it "2-5 times", and 370 people [3.2%] who said they had used it "6-10 times". That's a total of 4,767 DMT trips split between 2,640 people-not even two trips per person on average. Just a handful of people could easily match that number in pot highs.

As noted earlier, 15.4% of respondents were *not high* at the time of their entity contact experience—a larger percentage than reported for any individual drug. To get a better sense of the sorts of sober situations that result in contact with discarnate entities, Survey #3 entirely avoided mentioning psychoactive drugs. It included an open comments field, to solicit users' own descriptions of their contacts with discarnate entities.

The question was posed: "Have you ever experienced contact with a non-human, intelligent, discarnate entity (angel, faerie, alien, spirit)?" Among the 5,717 valid responses, 26.9% said they had experienced at least one entity contact, while another 11.7% said that they didn't know or weren't sure whether they had experiences that would qualify. Compared to Survey #1, this is a 10% lower reporting of entity encounters along with a 4% rise in uncertainty. The bracketed number following categories of entity or activity below shows how many people mentioned it, based on manual evaluation of the open field comments.

Within Survey #3, discarnate entities in the forms of aliens [105] and UFOs [32] were mentioned most often, and the idea that interaction with these provided access to novel information came up repeatedly:

On high doses of psilocybin, I achieve contact and communication with an entity that appears alien. It possesses knowledge beyond my imagination and uses concepts that are vast in scope.

Contact with God/gods/goddesses [104] was mentioned at a level similar to aliens:

My most intense and directly revelatory conversation with God was my first, and was of the LSDinspired variety. I asked God why it created the universe. The answer, "The one became many, that I may know myself." Six years later, this is still the cornerstone of my faith.

Ghosts (deceased loved ones/haunted houses) [93] were reported slightly less

frequently than gods; such experiences often occurred when the individual was a young child, or the experiences were related to contact made via dreaming.

Contact sometimes happened immediately before, during, or just after sleep [79], with sleep paralysis, night terrors, out-of-body experiences, nightmares, and lucid dreaming all described as contributing factors. About a dozen reports mentioned astral projection. Sometimes more than one of these sleep-related conditions was presented as being causative:

In my dreams, when I have OBE or when I am lucid during sleep paralysis.

Many people mentioned seeing a figure standing somewhere near the bed. Such sleep-related accounts sometimes described ghosts, aliens, demons, and angels, though faerie folk were rarely mentioned.

A small number of respondents expressed their opinions that the survey's focus was either entirely hogwash (i.e., "none of these things exist"), or at least partially so:

The terms angel and faerie make this question less credible. Aliens objectively exist, however; just ask the government. "Spirit" or "entity" would suffice for the other terms.

Despite this vocal minority of naysayers, faeries (elves, gnomes, etc.) [59], angels [52], and demons [41] all got a number of mentions:

I saw an angel with a 64-mile-long OG Mudbone erect cock.

was less typical than

When I was five an angel took me in my sleep out of my body and showed me the world. Then it dropped me back into bed and said goodbye.

Several people [26] expressed the feeling that the entities were guardians or guides that allowed them access to a bigger picture:

It was a being made of light, which I'd describe as a spirit guide. I was floating through the fabric of existence, and it brought me to a viewpoint from which I could observe all of time/space. It was rad. I watched my favorite pornstars take showers.

Though less common, people also mentioned reptiles/reptilians [25] and orbs/balls of light [25], with even fewer describing insects/ insectoids [15], cephalopods [11], and shadow people [11]. The remaining categorizable discarnate entities were: tree or plant spirits [10], fractal beings [9], clowns, jesters, harlequins [9], felines/cats [9], Satan/Lucifer [8], Jesus [7], white light experiences [7], Buddha [6], dragons [6], Gaia [5], ancestor spirits [4], entities wearing all-in-one wet- or motorcycle suits [4], faceless beings [3], and machine elves [3]. Many of the entities described did not easily fit into any categories.

Meditation [35] played a part in some people's experiences, and a few folks [8] said that a Ouija board facilitated their contact experience. Several people felt it was important they expressed that they were currently atheists:

I don't think any of them really happened, but I've seen and spoken to God, aliens, demons, sexy demons, 300-foot Frankenstein, and once I saw my dead friend's rotting corpse behind me in the mirror at a friend's house. Despite all of that, I'm still not a believer in aliens or UFOs or God or anything supernatural. I love hallucinogens, but I also know it's a chemical show in your mind, nothing more. I humor myself and interact with my made-up world under the influence, but I understand it's unreal and of no consequence. Knowing all this lets me stay safe; no matter how much acid I drop, flapping my arms and flying is impossible. Is any of this weird?

Although the agnostic viewpoint wasn't entirely missing:

I had a vision of the God of Doubt, who said that I had too much faith in Him. His message was,"Doubt Me."

While in numerous cases the experiences were described as having happened while the respondent was sober, descriptions specific to certain drugs were more common:



With various ayahuasca preparations, entities seem to be either (1) doorway guardians who decide whether one is ready to proceed further, (2) random benign or mischievous entities who happen to drop in to have a look and seem curious about one's presence in the "space" beyond the doorway, (3) teacher or guiding entities within the ayahuasca space. Ayahuasca entities can be anything from harlequin clown-scary, to laughing goblins attempting to relax [the observer], to angelic ethereal beings, to snakes/ spiders who just seem to be there in the background, to alien and indescribably complex insect-like forms. Using chewed Salvia divinorum leaves, the entities can seem to be from childhood; there's a sense of "having always known them", and they can be elf-like or take on bizarre qualities for which there are no words/concepts. With psilocybin, there are occasional entities with elf-like essences but a futuristic metallic-like form who tend to be of a guide or teacher type. While there are many forms, it is the subjective feeling of their existence outside of just being a creation of the mind, which is the common feature of all entity encounters.

Drugs mentioned in the comments field of Survey #3, without prompting, included DMT [233], LSD [87], Salvia divinorum [87], psilocybin-containing mushrooms [81], dextromethorphan [35], ayahuasca [29], ketamine [22], Cannabis [17], methoxetamine [15], and mescaline/cacti [13].

While we might get a general sense of the sort of drugs that are likely to produce such effects by counting which drugs are named most often, as discussed above, such an approach doesn't control for the fact that some drugs may simply be more popular, more frequently consumed, or more available than others.

Survey #3 also asked the

question, "Do you know who Terence McKenna is?" While the notion that McKenna's ideas have influenced the type or interpretation of visions that other people have probably has some truth to it, almost half of the respondents to the survey would have been 6-10 years old at the time of McKenna's death in 2000. The audio samples of his lectures in popular electronic music and his strong influence on contemporary authors make it difficult to assess how much influence his views have among current psychedelic users. Strassman's DMT book, which has sold over 102,000 copies and been made into a documentary, might now have more of an influence on generations coming of age after McKenna's death.

Including a question about McKenna inspired some comments from individuals less than enamored with his ideas, as well as some comments from his fans. A few people remarked that their own entity experiences "pre-dated [their] knowledge of McKenna and his entities".

In fact, 54% of survey respondents indicated that they had some knowledge of Terence McKenna. Of the people who had never heard of McKenna, 73% also said that they had never had contact with a discarnate entity. Of the 27% of the survey respondents who indicated that they had experienced contact with a discarnate entity, nearly 69% of those had heard of McKenna. In the end, it's not clear that this tells us too much.

It feels appropriate to close out this chapter with some text from one respondent's description of his sole "entity" encounter:

I was in the woods with two friends, passing along a tale that I'd just heard about Terence McKenna. It was a story about a tree in his back yard with a vine growing on it. He had noticed that the vine wouldn't grow on one of the dead branches of the tree. As he was observing this, the dead branch fell. It was almost as though the vine *knew* that this was bound to happen, so it stayed away from that branch.

But just as I was telling the exact part of the story about how the branch had fallen from the tree while Terence had been thinking about it, a branch in the tree right next to us simultaneously fell off. I believe it was Terence's spirit that made this branch fall, as a way of telling me he appreciated that I was sharing his story.

McKenna was fond of paraquoting the British geneticist J.B.S. Haldane, who wrote in his 1927 book, *Possible Worlds* (imagine here, Terence's nasal twang repeating the following):

Now, my own suspicion is that the universe is not only queerer than we suppose, but queerer than we *can* suppose.

#### I wholeheartedly concur.

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### Through the Four-Color Doors of Perception Psychedelic Gems of the Comic Book Genre

here's something essentially *trippy* about comic books. A medium in which words and images converge is going to be at least somewhat psychedelic. Reading comics engenders a novel mode of cognitive operation, one capable of generating mental events entirely different from those derived through either reading pure text or absorbing moving image alone. Furthermore, comic book superheroes are the closest thing contemporary culture has to living mythology, and those with pretensions to modern shamanism will tend to share traits with them. Ever since Ken Kesey began dressing up as his childhood hero, Captain Marvel, and encouraging his entourage to follow suit, the counterculture has continually reenacted the primal superhero traditions of outrageous costumes, taking on a totemic moniker, and cultivating the use of unusual abilities and extraordinary perceptions. Here are some gems from the field of *sequential visual art* that focus on the exploration of alternative consciousness.



**Flex Mentallo: Man of Muscle Mystery** by Grant Morrison and Frank Quitely (DC Comics, 1996/2012)

Don't let the leopard-print short-shorts fool you! Four-part comic book miniseries *Flex Mentallo: Man* of Muscle Mystery (reprinted at long last in a handsome hardcover "deluxe" edition) is one of the most sophisticated representations of a drug trip ever written or drawn.

In a world on the brink of collapse, the last of the comic book superheroes -ahalf-naked cartoon strongman with psychic muscles struggles to solve the mystery of his long-vanished comrade's uncanny disappearance.

At the same time in an alternate reality, an unnamed rock singer is dying of a drug overdose in the rain. He's taken everything in the house, including quite a bit of LSD, and he's talking on a mobile phone to the unseen voice on the other end of a suicide prevention hotline. All he wants to talk about are comic books.

Meanwhile, in a third version of reality, a legion of all-powerful super-beings faced with inescapable annihilation devise a plan to survive death by projecting themselves into another universe as *fictional characters*.

Naturally, as the story progresses the walls between worlds begin to break

down, culminating in collision with *Total Reality* and emotional catharsis in which there are "no more barriers between the real and the imaginary". If the

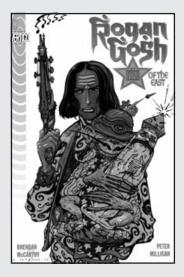
world of psychedelic comic books dished out awards, *Flex Mentallo* would win "Best Comic Book Depiction of an Acid Trip" and "Best Narrative Depiction of Successful Psychedelic Therapy". Insofar as *Flex Mentallo* is about the use of non-ordinary states of consciousness to heal psychic trauma and transmute pain and fear into wonder, it is a story about *psychedelic psychotherapy*. Insofar as the structure of the miniseries mirrors and discusses the history of superhero comic books, *Flex Mentallo* is, well... about comic books.

•••••• by David Bey

For years Scottish author Grant Morrison has been using the medium of superhero comics to saturate his readership with an all-out assault on ordinary reality. His comics read like catalogs of ultra-hip esoterica and cutting-edge visionary speculation. Additionally, Frank Quitely's illustrations for *Flex Mentallo* are the clearest, most precise realizations of fantastic reality since Winsor McKay's

*Flex Mentallo: Man of Muscle Mystery* is one of the most sophisticated representations of a drug trip ever written or drawn.

Little Nemo in Slumberland. Together they cut an astounding swath across the limits of what is conventionally possible to represent, telling a story that's both formally intriguing and genuinely moving.



#### Rogan Gosh: Star of the East

by Brendan McCarthy and Peter Milligan (Vertigo/DC Comics, 1994; first serialized in *Revolver* 1–6, Fleetway, 1990)

Turn off your mind, relax and float downstream... into the sitarfantastic surrealist wonderland of *Rogan Gosh*, where multi-cephalic Hindu gods, karma-surfing superheroes and long-dead Orientalist writers crash headlong into the bleak drizzle of London suburbia.

Rogan Gosh, written by UK comic book bad-boy Peter Milligan, is either the story of the eponymous "Karmanaut" in his struggle to free himself from the illusionary machinations of the villainous Soma Swami-or-it's what happens to curry-house waiter Raju and boorish lout Dean after the goddess Kali rips their heads off-or-it's the opium dream of a disgraced Rudyard Kipling-or-it's the dying thoughts of an unnamed post-punk, post-gender existentialist youth on a suicide trip. Milligan's writing is amazing if occasionally absurd. Much of it reads like Tim Leary trapped in the semantic universe of an Indian restaurant menu.

Once again, it's the interaction between the writing and the illustration that provides such a lush and unique means of expressing the psychedelic experience. To bring the world of *Rogan Gosh* to life, artist Brendan McCarthy mined his own childhood obsession with the *Amar Chitra Katha* tradition of Indian comic books—cross-wiring that with the electric offspring of punk-rock pop art to produce a lurching, spiral play of hyper-color lotuses, sitar-rayguns, corridors of endless uncertainty, ashrams of the absolute, and the dead-end sprawl of South London.

A psychedelic classic from the early 1990s which deserves to be better known, *Rogan Gosh* combines a tryptamine-style romp through transpersonal existentialism with the neon-cartoon fireworks of a night out on high-quality phenethylamines—a bizarro cultural mash-up pulled off with wit and weirdness.

#### **The Technopriests**

by Alejandro Jodorowsky, Zoran Janjetov, and Fred Beltran (Humanoids/DC Comics, 2004/2011)

Alejandro Jodorowsky is a profoundly strange and intensely prolific individual, having put in solid time as a filmmaker, actor, spiritual teacher, ceremonial psychotherapist, international expert on Tarot symbolism and, yes, comic book author. Probably best known for his films, including cult classics such as The Holy Mountain or acid Western epic weird-fest El Topo, Jodorowsky is also somewhat infamous for having tried and failed to make the first cinematic adaptation of Frank Herbert's Dune. Considering that he planned on casting Salvador Dalí as Emperor of the Known Universe and wanted to commission Pink Floyd to do the film score, it's little wonder the project went down in expensive flames. Jodorowsky had also almost completely rewritten the sci-fi classic, recasting it as his own epic of transhuman visionary mythology bearing slim resemblance to the original.

When the *Dune* project imploded, Jodorowsky recycled his voluminous additional material into a triptych of comic book epics, of which *The Technopriests* is one part. The story combines influences from Gnostic Christianity, technopaganism, and visionary shamanism fed through the wormhole of space-opera superhero



comics. It follows the adventures and education of "the Albino", a prophesied individual who must pass a variety of tests and penetrate various realms of existence in his quest for the power to lead humanity towards a society in which "healthy human relationships will be valued more highly than scientific advances".

With illustrations by Janjetov and brain-melting color by Beltran, *The Technopriests* is an eye-popping visual feast. Jodorowsky has been quoted as saying, "I ask of film what most North Americans ask of psychedelic drugs". The same would seem to be true of his work in comics. Indeed, in collaboration with Janjetov and Beltran, he brings worlds to life that would be impossible to film, even with today's CGI wizardry.

All the same, The Technopriests might best be appreciated as a predominantly visual experience. To call the dialogue "wooden" would be charitable, and there's hardly a character in the series who is anything less than a cardboard cut-out of mythic caricature. Additionally, the writing is almost completely lacking in humor. As humor is often the best and sometimes the only guide to states of altered perception, it seems like a psychedelic super-myth that isn't also *funny* is going to be lacking something. That said, The Technopriests is hands down one of the most gorgeous, mind-boggling examples of visionary narrative art available in any medium.

## The Distillation

Published Images	7,684	New in Last 6 Mos.	46	
Image Vaults	301	Submitted Each Day	1.7	
Viewed Per Day	21,980	Awaiting Processing	12,355	

DMT / Psilocybin Bottle, Photo by Erowid Crew





Testosterone Gel, Photo by Eduardo Hidalgo

#### **Erowid Gets Reviewed on GreatNonprofits**

Erowid Center has been recognized as a "Top-Rated Nonprofit" by GreatNonprofits.org, a respected site that provides ratings and reviews of nonprofit organizations. More than 300 people have rated Erowid, giving us an average of 4.75 out of 5 stars.

Though we frequently receive positive (and critical) feedback directly, having reviews published by an independent system helps establish credibility. The comments are especially useful for those first learning about Erowid such as media organizations and potential funders.

Erowid Center is guided by steadfast ethical principles and provides honest, experience-based drug information unavailable anywhere else.

-Ethan Nadelmann, Executive Director, Drug Policy Alliance

Erowid is a bridge between academic knowledge about drugs and the more "real-world" experience of the people who take them.

-Polquintana

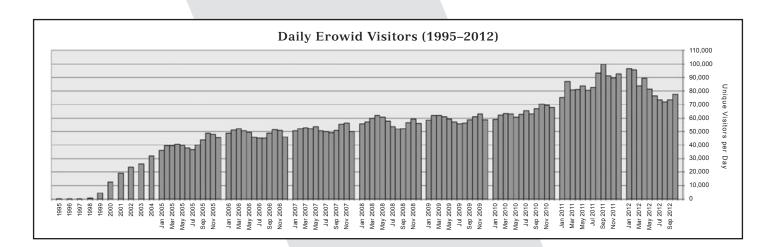
The appreciation expressed through reviews on GreatNonprofits has yielded clear statements about the positive impact of Erowid's unbiased information about psychoactive drugs. The collective belief in the importance of this project is what keeps Erowid Center going.

#### **Experience Reports**

Published Reports	22,674
Published in Last 6 Mos.	362
Active Triagers/Reviewers	43



Two Tins of Swedish Tobacco Snus (Moist Snuff), Photo by Scilence



#### Designing a Wisdom Cycle Survey

As part of our Generations Project, Erowid is designing a structured survey to explore the knowledge that elders have to share with younger generations about psychoactives, as well as discover what younger people most want to learn.

As the first generations of modern Westerners who have had access to psychedelics are aging, we are at a critical point in history. This survey is being designed to gain a better understanding of the hard-earned knowledge of elders who have used psychedelics in their life. Specifically, it will target wisdom about how to maximize benefits and minimize risks associated with intentional use of psychedelic/empathogenic drugs and psychoactives in general.

We need two groups of psychedelic veterans—one to assist in the creation of survey seed questions and another to test the survey and provide feedback. Please let us know if you would like to participate.

Summa	ry
General Content Pages	16,788
Archived Site Pages	4,678
Experience Reports	22,632
References	8,154
Ask Erowid	596
The Erowid Review	298
Content Images	5,663
Visionary Art	2,021
Total	60,830
Erowid Monthly Subscribers	18,481
Twitter Followers	3,695
Current Members	1,630
Daily Visitors	82,158

Erowid Statistics						
Visitors	82,158	File Hits	3,806,635			
Transfer	29.78 GB	Page Hits	359,716			
	Avg Daily Visitors	Avg Daily Page Hits	Avg Daily File Hits			
Oct 2012	77,603	338,959	3,425,956			
Sep 2012	73,441	337,289	3,405,147			
Aug 2012	72,047	334,307	3,452,414			
Jul 2012	73,539	339,107	3,461,206			
Jun 2012	76,622	350,637	3,685,890			
May 2012	82,549	358,321	3,822,863			
2011	86,237	387,683	3,977,250			
2009	59,483	384,788	3,682,793			
2007	51,979	409,501	3,559,761			
2005	41,412	402,567	2,544,202			
2003	25,999	347,012	1,421,800			
2001	19,138	206,418	885,099			
1999	4,608	36,867	140,093			
	Visitors Transfer Oct 2012 Sep 2012 Aug 2012 Jul 2012 Jul 2012 2011 2001 2007 2005 2003 2001	Visitors 82,158   Transfer 29.78 GB   Avg Daily Visitors   Oct 2012 77,603   Sep 2012 73,441   Aug 2012 72,047   Jul 2012 73,539   Jun 2012 76,622   May 2012 86,237   2001 86,237   2005 41,412   2003 25,999   2001 19,138	Visitors 82,158 File Hits   Transfer 29.78 GB Page Hits   Avg Daily Visitors Avg Daily Page Hits   Oct 2012 77,603 338,959   Sep 2012 73,441 337,289   Aug 2012 72,047 334,307   Jul 2012 73,539 339,107   Jun 2012 76,622 350,637   May 2012 82,549 358,321   2011 86,237 387,683   2009 59,483 384,788   2007 51,979 409,501   2005 41,412 402,567   2003 25,999 347,012   2001 19,138 206,418			

EcstasyData Statistics				
2012	Daily Visitors	3,115	Daily Page Hits	10,514
20	Results	245	Daily File Hits	385,390
	Results Published In		Testing Results (1996–2012)	
	2011	298	Total Results	2,530
AR	2010	183	MDMA Only	(30%) 766
BY YEAR	2009	161	MDMA + Something	(20%) 499
	2006-2008	143	No MDMA	(44%) 1104
<b>m</b>	2003-2005	433	– Nothing	108
	2000-2002	965	- Unidentified	104
	1996-1999	102	Non-Ecstasy Samples	(6%) 161

"I'm sure the universe is full of intelligent life. It's just been too intelligent to come here."

- Arthur C. Clarke (1917-2008)

"We're made of star-stuff. We are a way for the cosmos to know itself." - Carl Sagan (1934-1996)

"The simplest truth about man is that he is a very strange being; almost in the sense of being a stranger on the earth. In all sobriety, he has much more of the external appearance of one bringing alien habits from another land than of a mere growth of this one."

- G.K. Chesterton (1874-1936)

"The day science begins to study non-physical phenomena, it will make more progress in one decade than in all the previous centuries of its existence."

- Nikola Tesla (1856-1943)

"The important thing is not to stop questioning; curiosity has its own reason for existing. One cannot help but be in awe when contemplating the mysteries of eternity, of life, of the marvelous structure of reality."

- Albert Einstein (1879-1955)

"The scientist is not a person who gives the right answers, he's one who asks the right questions."

Claude Lévi-Strauss (1928–2009)

"...what we observe is not nature in itself but nature exposed to our method of questioning."

- Werner Heisenberg (1901-1976)

"Penetrating so many secrets, we cease to believe in the unknowable. But there it sits nevertheless, calmly licking its chops."

H.L. Mencken (1880–1956)

"If reality differs from person to person, can we speak of reality singular, or shouldn't we really be talking about plural realities? And if there are plural realities, are some more true (more real) than others?" - Philip K. Dick (1928-1982)

VERBATIM

"You could claim that anything's real if the only basis for believing in it is that nobody's proved it doesn't exist!"

- J.K. Rowling's Hermione (b. 1965)



"There is nothing which can better deserve our patronage than the promotion of science and literature. Knowledge is, in every country, the surest basis of public happiness."

- George Washington (1732-1799)

"The constant questioning of our values and achievements is a challenge without which neither science nor society can remain healthy."

- Aage Niels Bohr (1922-2009)

"Reality leaves a lot to the imagination."

John Lennon (1940–1980)

"Sometimes you can see things happen right in front of your eyes and still jump to the wrong conclusions." - Jodi Picoult's Mariah (b. 1966)

"The advantage of a bad memory is that one can enjoy the same good things for the first time several times."

- Friedrich Nietzsche (1844-1900)

"To be able to forget means sanity." - Jack London (1876-1916)

"There is nothing new except what is forgotten."

- Rose Bertin (1747-1813)

"Think of everything you have ever read, everything you have ever learned from holding a book in your hands and how that knowledge shaped you and made you who you are today."

- Ray Bradbury (1920-2012)

"Every addition to true knowledge is an addition to human power."

- Horace Mann (1796-1859)

"I have been and still am a seeker, but I have ceased to question stars and books; I have begun to listen to the teaching my blood whispers to me."

- Hermann Hesse (1877-1962)

"People don't care how much you know until they know how much you care."

- John C. Maxwell (b. 1947)

"For me, I am driven by two main philosophies, know more today about the world than I knew yesterday. And along the way, lessen the suffering of others. You'd be surprised how far that gets you."

Neil deGrasse Tyson (b. 1958)