Introduction to Trip Lab

Welcome to the trip [music] lab where we Welcome to the trip [music] lab where we explore integrative medicine, explore integrative medicine, psychedelics, and the unanswered psychedelics, and the unanswered questions between mind and body. I'm questions between mind and body. I'm your host, Dr. Mary Ella Wood, a [music] your host, Dr. Mary Ella Wood, a [music] triple board certified integrative triple board certified integrative medicine physician.

medicine physician. Hi everyone, welcome back to the trip Hi everyone, welcome back to the trip lab. Today we are diving deep into some lab. Today we are diving deep into some rabbit holes. We are going to explore rabbit holes. We are going to explore what I personally think are the most what I personally think are the most fascinating things about psychedelics.

fascinating things about psychedelics. They really are asking us to answer one They really are asking us to answer one specific question. What is specific question. What is consciousness? And that really in my consciousness? And that really in my opinion is one of the most interesting opinion is one of the most interesting things that humans can talk about and things that humans can talk about and think about. And yes, psychedelics are think about. And yes, psychedelics are continuously showing up as a very continuously showing up as a very promising treatment for mental health promising treatment for mental health conditions. And as a physician up until conditions. And as a physician up until this point, that's really what I have this point, that's really what I have focused on in my professional work. But focused on in my professional work. But what truly sparked my initial interest what truly sparked my initial interest in psychedelics is this. So everything in psychedelics is this.

Substack and Episode Roadmap

So everything that we are going to talk about today that we are going to talk about today and I am so jazzed. This stuff really and I am so jazzed. This stuff really lights my soul on fire. And as a quick lights my soul on fire. And as a quick reminder, the Trip Lab is now on reminder, the Trip Lab is now on Substack. So the podcast is still Substack. So the podcast is still definitely going to be on Spotify, definitely going to be on Spotify, YouTube, Apple, wherever you get your YouTube, Apple, wherever you get your podcasts, but every episode will now podcasts, but every episode will now also live on Substack with expanded show also live on Substack with expanded show notes, full episode transcripts, and all notes, full episode transcripts, and all of the studies and sources I reference of the studies and sources I reference linked all in one place. So you can find linked all in one place. So you can find my Substack page at dr my Substack page at dr miela.substack.com.

miela.substack.com. miela.substack.com. So dr m a r y l a.substack.com So dr m a r y l a.substack.com and it will of course also be linked in and it will of course also be linked in the episode description. And paid the episode description. And paid subscribers on Substack will also get subscribers on Substack will also get more in-depth companion guides to all of more in-depth companion guides to all of these triplap episodes along with many these triplap episodes along with many more in-depth physician created guides more in-depth physician created guides and goodies outside of the podcast. And and goodies outside of the podcast. And I am super excited about the companion I am super excited about the companion guide for this episode. So it's called guide for this episode. So it's called the reality field guide and it goes the reality field guide and it goes deeper into everything that we are about deeper into everything that we are about to explore here in a really fun to explore here in a really fun anesthetic field guide format that you anesthetic field guide format that you can download as a PDF. So, it includes can download as a PDF. So, it includes extras like how to interpret the extras like how to interpret the research when a topic gets weird, which research when a topic gets weird, which we will definitely get into today, a we will definitely get into today, a little map of the major consciousness little map of the major consciousness theories, case files, deeper dives into theories, case files, deeper dives into all of the declassified government all of the declassified government documents that we're going to talk about documents that we're going to talk about today, and my favorite part, a choose today, and my favorite part, a choose your own rabbit hole section if you your own

rabbit hole section if you really want to keep going. So, really want to keep going. So, definitely check it out. I am honestly definitely check it out. I am honestly loving Subjack because it really has loving Subjack because it really has given me a creative outlet to do so much given me a creative outlet to do so much more than just record a podcast. So more than just record a podcast. So definitely go check it out if any of definitely go check it out if any of that is of interest to you. But now on that is of interest to you. But now on to today's episode. So a quick little to today's episode. So a quick little road map. We are going to talk about the road map. We are going to talk about the different theories of consciousness and different theories of consciousness and what we know from a neuroscience what we know from a neuroscience perspective. And of course the perspective. And of course the psychedelic research has really pushed a psychedelic research has really pushed a lot of those ideas forward. We're also lot of those ideas forward. We're also going to go deeper into the more going to go deeper into the more philosophical theories of consciousness.

philosophical theories of consciousness.

What Consciousness Means

Some I will say are a little bit bold Some I will say are a little bit bold and controversial. So put on your and controversial. So put on your curious explorer hat. Then we're going curious explorer hat. Then we're going to pressure test what we know about to pressure test what we know about psychedelics against these theories, psychedelics against these theories, both the neuroscience ones and the both the neuroscience ones and the philosophy ones. So with that, we are philosophy ones. So with that, we are going to get a little bit weird and going to get a little bit weird and trippy. But fear not, this episode and trippy. But fear not, this episode and of course the entire transcript will be of course the entire transcript will be available on Substack and will be available on Substack and will be heavily cited and I will always clearly heavily cited and I will always clearly state where all of these facts and state where all of these facts and theories are coming from and also theories are coming from and also clearly differentiate between what is clearly differentiate between what is actually been studied, what is more just actually been studied, what is more just postulation and of course what is just a postulation and of course what is just a theory. We are also going to dive into theory. We are also going to dive into how DMT really pokes holes in so many of how DMT really pokes holes in so many of these frameworks that we currently have these frameworks that we currently have about consciousness. So that means about consciousness. So that means getting into what the entities that getting into what the entities that people see during a DMT experience could people see during a DMT experience could actually mean. So for those of you that actually mean. So for those of you that don't know, people quite literally see don't know, people quite literally see humans, elves, fairies when they take humans, elves, fairies when they take DMT and they report that those DMT and they report that those experiences feel realer than real. And experiences feel realer than real. And this is not just woo woo. This is not this is not just woo woo. This is not just hearsay. John's Hopkins, a major just hearsay. John's Hopkins, a major academic medical center, has actually academic medical center, has actually done some pretty interesting research in done some pretty interesting research in this realm, which we will definitely get this realm, which we will definitely get into. We will also look at what into. We will also look at what indigenous thoughts and voices have to indigenous thoughts and voices have to say about psychedelics and consciousness say about psychedelics and consciousness more broadly, and more importantly, why more broadly, and more importantly, why altered states across widely different altered states across widely different contexts repeatedly generate similar contexts repeatedly generate similar experiences of unity, ineffibility, and experiences of unity, ineffibility, and interconnectedness. Then we are going to interconnectedness. Then we are going to be little spies and see what the US be little spies and see what the US government was up to years ago and what government was up to years ago and what I suspect probably is still up to today I suspect probably is still up to today in some way or shape to really in some way or shape to really understand this stuff because if you understand this stuff because if you don't already know a lot of these don't already know a lot of these documents are now declassified. So MK documents are now declassified. So MK Ultra, Bluebird, Artichoke, remote Ultra, Bluebird, Artichoke, remote viewing work and so much more. So viewing work and so much more. So through all that ultimately what we are through all that ultimately what we are going to talk about and answer is what going to talk about and answer is what is reality? And when we call is reality? And when we call psychedelics hallucinogens, psychedelics hallucinogens, are they actually producing a are they actually producing a hallucination or are they really showing hallucination or are they really showing us more of what is actually there? So us more of what is actually there? So let's just get into it. We will start let's just get into it. We will start far less weird, of course. So what are far less weird, of course. So what are the current widely accepted

neuroscience the current widely accepted neuroscience and philosophical theories of and philosophical theories of consciousness? So consciousness very consciousness? So consciousness very simply is thought to be our subjective simply is thought to be our subjective experience. So what it feels like to be experience. So what it feels like to be alive, to have thoughts and feelings, alive, to have thoughts and feelings, and ultimately an awareness of the and ultimately an awareness of the world. And in more psychology speak, we world. And in more psychology speak, we differentiate this from differentiate this from preconsciousness, which is information preconsciousness, which is information that we aren't thinking about in the that we aren't thinking about in the present moment, but can easily bring present moment, but can easily bring forward into our consciousness. So forward into our consciousness. So things like our address or our phone things like our address or our phone number. Then our subconscious gets a number. Then our subconscious gets a little bit deeper. So this is what little bit deeper. So this is what influences our behavior without us influences our behavior without us really knowing about it. And then really knowing about it. And then unconscious, a little bit nebulous. It unconscious, a little bit nebulous. It can mean a couple different things. So can mean a couple different things. So psychologically it's the hidden deep psychologically it's the hidden deep memories or desires that we cannot memories or desires that we cannot easily access. From a medical easily access. From a medical perspective we think of it as both a perspective we think of it as both a mental and a physical state where we are mental and a physical state where we are unaware or unable to respond. But really unaware or unable to respond. But really it's more of a disconnect. When we are it's more of a disconnect. When we are in deep sleep or under anesthesia we in deep sleep or under anesthesia we appear to be unresponsive to the world appear to be unresponsive to the world around us. But unresponsiveness does not around us. But unresponsiveness does not necessarily mean that consciousness has necessarily mean that consciousness has gone away in these states. We obviously gone away in these states. We obviously dream while we're sleeping. And under dream while we're sleeping. And under anesthesia, consciousness, anesthesia, consciousness, connectedness, and responsiveness can connectedness, and responsiveness can disassociate. And I'm sure you've all disassociate. And I'm sure you've all heard the accounts of people going under heard the accounts of people going under anesthesia and then report very specific anesthesia and then report very specific events and out-of- body experiences events and out-of- body experiences during the anesthesia that turn out to during the anesthesia that turn out to be true. And there's actually a quite be true. And there's actually a quite fascinating paper published in fascinating paper published in anesthesiology that dives into the idea anesthesiology that dives into the idea that unresponsiveness that unresponsiveness actually does not equal unconsciousness.

actually does not equal unconsciousness.

Neuroscience Theories of Consciousness

So essentially they explain how So essentially they explain how responsiveness gets turned off in responsiveness gets turned off in different ways but consciousness itself different ways but consciousness itself actually does appear to remain under actually does appear to remain under anesthesia. So let's talk about the anesthesia. So let's talk about the neuroscience definitions of neuroscience definitions of consciousness. And I think the first consciousness. And I think the first thing that we think of is the neural thing that we think of is the neural correlates of consciousness which are correlates of consciousness which are the smallest set of brain structures and the smallest set of brain structures and events that happen to make consciousness events that happen to make consciousness happen. So which neurons are firing and happen. So which neurons are firing and which pathways are lit up so that we which pathways are lit up so that we experience something. So for example, we experience something. So for example, we can map out the patterns in our brain can map out the patterns in our brain that reliably correlate with the that reliably correlate with the experience of knowing for example a experience of knowing for example a color is blue. But why does that color is blue. But why does that particular neural activity feel like particular neural activity feel like blue from the inside? So this whole blue from the inside? So this whole neuroscience idea of consciousness as neuroscience idea of consciousness as purely neural correlates really does purely neural correlates really does align with the philosophical idea of align with the philosophical idea of physicalism. So that's the idea that physicalism. So that's the idea that everything including consciousness stems everything including consciousness stems from something physical. So from something physical. So consciousness itself is a physical consciousness itself is a physical process that happens in the brain in process that happens in the brain in response to physical stimuli that come response to physical stimuli that come in. And this sounds very simple, but in. And this sounds very simple, but it's not actually reduced to one single it's not actually reduced to one single neuron firing. It really is more of a neuron firing. It really is more of a collection of

complex processes collection of complex processes happening. And on one hand, we really happening. And on one hand, we really can't argue that idea too much because can't argue that idea too much because we can chemically suppress these events we can chemically suppress these events with anesthetic drugs and we can change with anesthetic drugs and we can change the way that things are perceived. But the way that things are perceived. But then we get into David Chalmer's hard then we get into David Chalmer's hard problem of consciousness. So basically problem of consciousness. So basically it's yes we can explain how information it's yes we can explain how information comes in. So light entering the eye for comes in. So light entering the eye for example. How the brain processes that example. How the brain processes that information and compares it to a prior information and compares it to a prior experience which is predictive experience which is predictive processing. We'll get into that in a processing. We'll get into that in a minute here. And then ultimately we minute here. And then ultimately we identify something as a color or an identify something as a color or an object etc etc. But still how does any object etc etc. But still how does any of that become subjective experience?

of that become subjective experience? Mapping the neural activity does not Mapping the neural activity does not fully explain how physical activity fully explain how physical activity becomes an inner experience. So this can becomes an inner experience. So this can get a little bit confusing, but I think get a little bit confusing, but I think another related way to understand this another related way to understand this is Thomas Nagel's famously asked is Thomas Nagel's famously asked question, what is it like to be a bat?

question, what is it like to be a bat? So think about this. We can technically So think about this. We can technically understand every neuron involved in understand every neuron involved in echolocation and still have no idea what echolocation and still have no idea what echolocation actually feels like inside echolocation actually feels like inside a bat's consciousness because we are not a bat's consciousness because we are not bats. So his point was basically that bats. So his point was basically that describing the mechanism of a brain does describing the mechanism of a brain does not actually help us understand the not actually help us understand the subjective experience itself. So subjective experience itself. So ultimately the hard problem is still a ultimately the hard problem is still a hard problem and we don't have an answer hard problem and we don't have an answer to it at least in neuroscience at this to it at least in neuroscience at this time. But where I think things get time. But where I think things get really interesting is when we look at really interesting is when we look at what happens when the brain is injured.

what happens when the brain is injured. And that sort of does actually point us And that sort of does actually point us more towards this physical understanding more towards this physical understanding of consciousness. Because when specific of consciousness. Because when specific parts of the brain are injured or parts of the brain are injured or surgically removed, which I'll talk surgically removed, which I'll talk about in a second, it does alter about in a second, it does alter awareness, language, emotional awareness, language, emotional processing, and actually wakefulness processing, and actually wakefulness itself. So yes, maybe that points to a itself. So yes, maybe that points to a more physical understanding of more physical understanding of consciousness. However, there are some consciousness. However, there are some fascinating pieces of brain injury fascinating pieces of brain injury literature that complicate our literature that complicate our understanding of physical processing. I understanding of physical processing. I think one really cool example is called think one really cool example is called blind sight. So, if the primary visual blind sight. So, if the primary visual cortex is injured, then our ability to cortex is injured, then our ability to see something goes away. So, makes see something goes away. So, makes sense. If you put an object in front of sense. If you put an object in front of these people and you ask, "What do you these people and you ask, "What do you see?" they will essentially say nothing.

see?" they will essentially say nothing. Okay, that makes sense. Okay, that makes sense. But then if you force them to guess But then if you force them to guess where an object is, which direction you where an object is, which direction you are moving it, or just other questions are moving it, or just other questions about the object, they actually answer about the object, they actually answer those questions correctly. Better than those questions correctly. Better than chance. Not 100% but better than chance.

chance. Not 100% but better than chance. So essentially what this means is there So essentially what this means is there is actually no conscious visual is actually no conscious visual experience by technical standards, but experience by technical standards, but some sort of process is happening so some sort of process is happening so

that these patients experience visual that these patients experience visual information in some way or the other. We information in some way or the other. We don't exactly know how but somehow some don't exactly know how but somehow some information is coming in. Kind of information is coming in. Kind of related to this is split brain patients.

related to this is split brain patients. So in the past there was a surgical So in the past there was a surgical treatment for patients with severe treatment for patients with severe epilepsy just a seizure disorder in epilepsy just a seizure disorder in which the corpus colossum was severed or which the corpus colossum was severed or cut. So the corpus colossum is the major cut. So the corpus colossum is the major bridge connecting the right and left bridge connecting the right and left hemispheres. So it was cut completely.

hemispheres. So it was cut completely. So no connection between left brain and So no connection between left brain and right brain. And this actually created right brain. And this actually created some really bizarre dissociations some really bizarre dissociations between what one hemisphere could between what one hemisphere could process and what a person could process and what a person could consciously report. So for example, and consciously report. So for example, and I'll go really slow here because it can I'll go really slow here because it can get a little bit confusing because the get a little bit confusing because the left brain controls the right body, vice left brain controls the right body, vice versa, the visual field. So it's a versa, the visual field. So it's a little bit confusing. So I'll try to go little bit confusing. So I'll try to go slow here. So for example, you show an slow here. So for example, you show an object to only the left visual field object to only the left visual field which is processed in the right which is processed in the right hemisphere. That actually leads the hemisphere. That actually leads the patient to use their left hand to pick patient to use their left hand to pick up that object. So they actually indeed up that object. So they actually indeed picked up the object. But if you ask picked up the object. But if you ask them what they saw, they will still say them what they saw, they will still say nothing because the left hemisphere nothing because the left hemisphere never received that visual information never received that visual information even though they picked it up. So this even though they picked it up. So this kind of produced a very famous question kind of produced a very famous question of did we just create two of did we just create two consciousnesses inside one skull? So consciousnesses inside one skull? So ponder that. I think it is so ponder that. I think it is so fascinating. But I do want to move on.

fascinating. But I do want to move on. We'll talk about the phalamus now which We'll talk about the phalamus now which is where psychedelics start to come in.

is where psychedelics start to come in. So the phalamus located pretty central So the phalamus located pretty central in our brain. It is considered our in our brain. It is considered our sensory andformational gatekeeper. So it sensory andformational gatekeeper. So it essentially filters, sorts out and then essentially filters, sorts out and then routes incoming sensory information. And routes incoming sensory information. And most of that incoming sensory most of that incoming sensory information never actually reaches information never actually reaches conscious awareness. If it did, we would conscious awareness. If it did, we would be completely overstimulated all day be completely overstimulated all day long. So a way to compare this long. So a way to compare this anesthesia very simplistically it's a anesthesia very simplistically it's a lot more complicated than that disrupts lot more complicated than that disrupts the phalamocortical processes that help the phalamocortical processes that help sensory information become consciously sensory information become consciously available which is why you don't feel available which is why you don't feel all the things happening during surgery all the things happening during surgery doesn't come into conscious awareness.

doesn't come into conscious awareness. On the other hand psychedelics appear to On the other hand psychedelics appear to alter this filtering and gating in the alter this filtering and gating in the opposite way.

opposite way. >> [snorts] >> [snorts] >> [snorts] >> So information that would normally be >> So information that would normally be suppressed or something that we give suppressed or something that we give less weight to may actually have more less weight to may actually have more influence on the conscious experience influence on the conscious experience and reach more of conscious awareness.

and reach more of conscious awareness. So this whole fact is kind of the the So this whole fact is kind of the the

thesis for this episode. So why I am thesis for this episode. So why I am postulating that psychedelics may postulating that psychedelics may actually show us more of reality not actually show us more of reality not less of it. But we are going to take an less of it. But we are going to take an entire episode to hash all of that out.

entire episode to hash all of that out. So sit tight. that really ties into the So sit tight. that really ties into the entropic brain hypothesis which was entropic brain hypothesis which was originally proposed by Robin Carheart originally proposed by Robin Carheart Harris who is major major person in Harris who is major major person in psychedelic research in 2014. So he psychedelic research in 2014. So he essentially postulated that normal essentially postulated that normal waking consciousness is actually a waking consciousness is actually a suppression of entropy or disorder. So suppression of entropy or disorder. So this suppression allows us all to live this suppression allows us all to live in an agreed upon reality so that we can in an agreed upon reality so that we can all function in society and interact all function in society and interact with each other. Psychedelics disrupt with each other. Psychedelics disrupt this. So in one sense they create more this. So in one sense they create more quoteunquote disorder or entropy. So quoteunquote disorder or entropy. So that was kind of an initial postulation that was kind of an initial postulation which upon further research ended up which upon further research ended up being a little bit too simple. So that being a little bit too simple. So that theory eventually morphed into what is theory eventually morphed into what is now called the reebus model rebu the now called the reebus model rebu the relaxed beliefs under psychedelics. So relaxed beliefs under psychedelics. So in 2019 also developed by Robin Khart in 2019 also developed by Robin Khart Harris and also Carl Fston. So, this new Harris and also Carl Fston. So, this new model also incorporates predictive model also incorporates predictive processing theory, which I told you we processing theory, which I told you we were going to get back to. And this is were going to get back to. And this is essentially what predictive processing essentially what predictive processing theory is. As we grow up and we develop theory is. As we grow up and we develop and we learn new things as adults, we and we learn new things as adults, we update our model of the world. So, for update our model of the world. So, for example, once we learn what a table is, example, once we learn what a table is, we don't have to construct a table from we don't have to construct a table from scratch. So, bottom up, every time we scratch. So, bottom up, every time we see one, we just know, okay, that is a see one, we just know, okay, that is a table. So this top-down understanding table. So this top-down understanding and essentially highle belief systems and essentially highle belief systems end up running the show rather than that end up running the show rather than that bottom up. So psychedelics quote unquote bottom up. So psychedelics quote unquote relax those beliefs, hence the name. So relax those beliefs, hence the name. So they essentially allow more of that they essentially allow more of that bottom up information to come through.

bottom up information to come through.

Predictive Processing and Psychedelics

So we see more details and more of those So we see more details and more of those details become available in conscious details become available in conscious awareness. And another modern theory awareness. And another modern theory that helps us understand this is called that helps us understand this is called global neuronal workspace theory.

global neuronal workspace theory. So we essentially have the same So we essentially have the same underlying idea. So our brain is underlying idea. So our brain is processing a ton of information all the processing a ton of information all the time, but most of it stays in the time, but most of it stays in the background and something only becomes background and something only becomes consciously available when it gets consciously available when it gets amplified enough to be broadcast across amplified enough to be broadcast across multiple brain networks. So we'll give multiple brain networks. So we'll give you an example. So imagine you're in a you an example. So imagine you're in a crowded coffee shop. You are not crowded coffee shop. You are not consciously paying attention to all of consciously paying attention to all of the conversations happening around you.

the conversations happening around you. Sure, maybe you're a little bit nosy and Sure, maybe you're a little bit nosy and you're listening into one, but you can't you're listening into one, but you can't physically listen to all the physically listen to all the conversations at once. That's beside the conversations at once. That's beside the point. So, you're either working or point. So, you're either working or thinking or eavesdropping and then thinking or eavesdropping and then suddenly someone across the room says suddenly someone across the room says your

name. So, hearing your name will your name. So, hearing your name will immediately grab your attention. So, immediately grab your attention. So, that information quote unquote won that information quote unquote won access to your global workspace. And access to your global workspace. And there was a pretty interesting 2025 there was a pretty interesting 2025 paper in Nature that actually studied paper in Nature that actually studied this. So, global workspace theory this. So, global workspace theory against integrated information theory.

against integrated information theory. IIT which is another major theory of IIT which is another major theory of consciousness that places particular consciousness that places particular emphasis on a posterior cortical hot emphasis on a posterior cortical hot zone. So interestingly when they zone. So interestingly when they compared them neither theory actually compared them neither theory actually fully worked in their models. So what fully worked in their models. So what they're expecting so either a they're expecting so either a characteristic global ignition including characteristic global ignition including more likely frontal involvement that more likely frontal involvement that would point towards global workspace would point towards global workspace theory or a sustained posterior theory or a sustained posterior synchronization and communication to synchronization and communication to point towards the integrated information point towards the integrated information theory but neither actually happened.

theory but neither actually happened. They did see some characteristics of They did see some characteristics of both. But ultimately this paper both. But ultimately this paper concludes that still again we have no concludes that still again we have no idea what creates consciousness and I idea what creates consciousness and I think what happens during a psychedelic think what happens during a psychedelic experience adds even more layers to experience adds even more layers to this. So if we play a little bit with this. So if we play a little bit with this global neuronal workspace theory a this global neuronal workspace theory a little and say okay yes partially little and say okay yes partially consciousness depends on what consciousness depends on what information gets amplified then information gets amplified then psychedelics really are actually psychedelics really are actually changing the rules of this broadcasting.

changing the rules of this broadcasting. So networks that are normally fairly So networks that are normally fairly separate become less segregated and more separate become less segregated and more information flows between them. So if information flows between them. So if that theory is correct, are psychedelics that theory is correct, are psychedelics actually making us more conscious? So actually making us more conscious? So enter Aldias Huxley who is famous for enter Aldias Huxley who is famous for writing one of the first major accounts writing one of the first major accounts of what it's subjectively like to take a of what it's subjectively like to take a psychedelic. So he actually proposed a psychedelic. So he actually proposed a theory that aligns with this before he theory that aligns with this before he even took a psychedelic at all. So he even took a psychedelic at all. So he developed this idea of a quote unquote developed this idea of a quote unquote reducing valve which he did draw heavily reducing valve which he did draw heavily from Henry Bergson and William James from Henry Bergson and William James which essentially states that normal which essentially states that normal consciousness filters down an enormous consciousness filters down an enormous amount of possible information and amount of possible information and experience. But then after taking experience. But then after taking psychedelics he wondered whether the psychedelics he wondered whether the psychedelics temporarily allowed more of psychedelics temporarily allowed more of reality, what he called quote unquote reality, what he called quote unquote the mind at large to come into conscious the mind at large to come into conscious awareness. So a little bit older, awareness. So a little bit older, definitely more of a theory. This definitely more of a theory. This actually does tie in quite nicely to our actually does tie in quite nicely to our neuroscience understanding of what we neuroscience understanding of what we call predictive processing. So again, call predictive processing. So again, this is a leading neuroscience framework this is a leading neuroscience framework proposing that we are not simply proposing that we are not simply experiencing the world as a passive experiencing the world as a passive real-time recording. So our brains are real-time recording. So our brains are constantly predicting what is out there constantly predicting what is out there and then comparing those predictions and then comparing those predictions with information coming in and then with information coming in and then constructing the most useful version of constructing the most useful version of the world that we consciously the world that we consciously experience. And anal has actually experience. And anal has actually described this as a quote unquote described this as a quote unquote controlled hallucination. So reality controlled hallucination. So reality itself may actually be or at least what itself may actually be or at least what we perceive reality a controlled we perceive reality a controlled hallucination. So obviously

psychedelics hallucination. So obviously psychedelics mess with those rules of construction.

mess with those rules of construction. So we talked about that with the reebus So we talked about that with the reebus model. So again, this essentially model. So again, this essentially proposes that our brain gives less proposes that our brain gives less weight to our prior understanding of the weight to our prior understanding of the world and more weight on the smaller world and more weight on the smaller things that we would normally filter things that we would normally filter out. That's why people experience seeing out. That's why people experience seeing the world in more detailed. But what I the world in more detailed. But what I do think throws a wrench in some of the do think throws a wrench in some of the idea of this quote unquote more idea of this quote unquote more information is allowed to come in thing information is allowed to come in thing is the DMT studies that were done when is the DMT studies that were done when people's eyes were closed. So even with people's eyes were closed. So even with closed eyes, people experience closed eyes, people experience incredibly vivid visuals. So that incredibly vivid visuals. So that information is not necessarily coming information is not necessarily coming from light entering the eyes from the from light entering the eyes from the outside world per se. I mean we do get outside world per se. I mean we do get some light coming in with our eyes are some light coming in with our eyes are closed but it's not as much as our eyes closed but it's not as much as our eyes open. So where is that information open. So where is that information coming from? So maybe perhaps the brain coming from?

Beyond the Brain: Alternative Consciousness Theories

So maybe perhaps the brain is creating it like we create a dream or is creating it like we create a dream or perhaps that conscious experience is perhaps that conscious experience is coming from somewhere else. So we'll get coming from somewhere else. So we'll get back into DMT in a second here because back into DMT in a second here because there's so much interesting stuff there.

there's so much interesting stuff there. But ultimately I think we can think But ultimately I think we can think about this question more broadly. What about this question more broadly. What information is the brain constructing information is the brain constructing experience from? For both either normal experience from? For both either normal quote unquote reality aka controlled quote unquote reality aka controlled hallucination if we do accept predictive hallucination if we do accept predictive processing theory which is a processing theory which is a well-established theory or when we're well-established theory or when we're taking a psychedelic and that gets taking a psychedelic and that gets completely altered. So that let's jump completely altered. So that let's jump down that rabbit hole now and we will down that rabbit hole now and we will take a controlled descent. But fair take a controlled descent. But fair warning we are going to go deep into warning we are going to go deep into some really interesting consciousness some really interesting consciousness theories here. So we'll start with theories here. So we'll start with Donald Hoffman who takes a more Donald Hoffman who takes a more evolutionary position to question what evolutionary position to question what is consciousness? Why do we have is consciousness? Why do we have consciousness? So he really asks why consciousness? So he really asks why would evolution care whether we perceive would evolution care whether we perceive reality accurately.

reality accurately. Natural selection does not actually Natural selection does not actually reward philosophical truth. It rewards reward philosophical truth. It rewards survival and reproduction. So if seeing survival and reproduction. So if seeing reality exactly as it is costs more reality exactly as it is costs more energy, evolution should theoretically energy, evolution should theoretically favor a simplified version. and also of favor a simplified version. and also of course one that sort of evens out the course one that sort of evens out the playing field so that we're all playing field so that we're all experiencing the same reality. So of experiencing the same reality. So of course we can interact with people in course we can interact with people in the way that we want to in ways that the way that we want to in ways that will allow us to reproduce. So Hoffman will allow us to reproduce. So Hoffman came up with this interface theory of came up with this interface theory of perception to really explain this. And perception to really explain this. And the easiest way that he explained this, the easiest way that he explained this, which I think is a really cool way of which I think is a really cool way of explaining it, is to think about a explaining it, is to think about a computer desktop. So when you open a computer desktop. So when you open a laptop and you see that little blue laptop and you see that little blue folder, it's obviously not actually a folder, it's obviously not actually a tiny blue folder that is physically tiny blue folder that is physically sitting in the computer. So underneath sitting in the computer. So underneath that icon are electrical states, that icon are electrical states, transistors, codes, and most

of us, transistors, codes, and most of us, myself certainly included, have no idea myself certainly included, have no idea how to actually interact with directly.

how to actually interact with directly. So the blue folder is the interface. So So the blue folder is the interface. So Hoffman thinks that perception works in Hoffman thinks that perception works in this exact same way. So why does this this exact same way. So why does this have to do with evolution? So he applied have to do with evolution? So he applied it to game theory to really understand it to game theory to really understand this. So think about it this way.

this. So think about it this way. Instead of the players, which are Instead of the players, which are organisms, consciously choosing a move, organisms, consciously choosing a move, a quote unquote strategy, is actually an a quote unquote strategy, is actually an inherited behavioral or physical trait inherited behavioral or physical trait that maximizes survival of the fittest.

that maximizes survival of the fittest. So he called this fitness beats truth. So he called this fitness beats truth. And he actually built this crazy And he actually built this crazy mathematical model on a computer mathematical model on a computer simulator to actually test this out. So simulator to actually test this out. So he had these different quote unquote he had these different quote unquote organisms or players compete for organisms or players compete for resources. So, one type was rewarded for resources. So, one type was rewarded for perceiving the actual state of the world perceiving the actual state of the world as accurately as possible. And then as accurately as possible. And then another type did not actually care what another type did not actually care what was literally true. It only perceived was literally true. It only perceived things similar to those quote unquote things similar to those quote unquote folders on a desktop. So, for example, folders on a desktop. So, for example, the more literal organism would see a the more literal organism would see a bucket of water as 52 units, while the bucket of water as 52 units, while the latter would just see good bucket. So he latter would just see good bucket. So he did all these simulations and over many did all these simulations and over many simulated generations the latter out simulated generations the latter out competed so chose the correct resource competed so chose the correct resource more correctly than its numerical more correctly than its numerical counterpart. So categorizing quickly as counterpart. So categorizing quickly as good or bad allowed the simpler organism good or bad allowed the simpler organism to gather the resource more efficiently to gather the resource more efficiently and survived longer. So if we really and survived longer. So if we really take a step back the same themes remain take a step back the same themes remain when we look at all of what we have when we look at all of what we have talked about so far. So I think we can talked about so far. So I think we can all agree no one can really argue that all agree no one can really argue that we're not consciously aware of we're not consciously aware of everything that is out there. So Huxley everything that is out there. So Huxley called this the reducing valve. Hoffman called this the reducing valve. Hoffman calls it interface. Predictive calls it interface. Predictive processing tells us that perception is processing tells us that perception is an inference. Then we have the reebus an inference. Then we have the reebus model that tells us that psychedelics model that tells us that psychedelics probably just mess with all of this in probably just mess with all of this in some way or another. So different some way or another. So different theories, different claims, but they all theories, different claims, but they all do point us towards the same assumption.

do point us towards the same assumption. Regular human perception does not have a Regular human perception does not have a full view of reality. So again we go full view of reality. So again we go back to our question what exactly are back to our question what exactly are psychedelics showing us. So possibility psychedelics showing us. So possibility one hallucinations. So an interface one hallucinations. So an interface glitch something that is not there that glitch something that is not there that our brains just make up as psychedelics our brains just make up as psychedelics disrupt normal prediction and network disrupt normal prediction and network organization. So plausible. Yes.

organization. So plausible. Yes. Possibility two is that they may Possibility two is that they may actually allow us to experience more actually allow us to experience more parts of the machinery of our own parts of the machinery of our own interface that are normally hidden from interface that are normally hidden from consciousness. So we have more consciousness. So we have more spontaneous brain activity, more spontaneous brain activity, more interosception which is feeling things interosception which is feeling things inside our own body, maybe more visual inside our own body, maybe more visual information. So again, yes, plausible.

information. So again, yes, plausible. Or possibility three is that they Or possibility three is that they actually are showing us something actually are showing us something external to us that is real, but we external to us that is real, but we can't normally see under normal waking can't normally see under normal waking consciousness. And that possibility consciousness. And that possibility three, which I think is the most three, which I think is the most fascinating one to think about, Hoffman fascinating one to think about, Hoffman is actually now digging into that third is actually now digging into that third possibility. So this year 2026 he possibility. So this year 2026 he released a theoretical preprint with released a theoretical preprint with Andrew Galammore who is a neurobiologist Andrew Galammore who is a neurobiologist and pharmarmacologist and ne Hermanson and pharmarmacologist and ne Hermanson and they asked whether DMT may be and they asked whether DMT may be messing with our interface enough that messing with our interface enough that inaccessible conscious beings may inaccessible conscious beings may actually be seen. Basically they're actually be seen. Basically they're asking are these entities that people asking are these entities that people see on DMT real? And as of right now, see on DMT real? And as of right now, they are very explicitly not saying that they are very explicitly not saying that they have proven that these DMT entities they have proven that these DMT entities are real, but they are looking into are real, but they are looking into this. So again, we will get back to DMT this. So again, we will get back to DMT in a minute here, but let's keep heading in a minute here, but let's keep heading on down that rabbit hole a little bit on down that rabbit hole a little bit deeper. So up to this point, we've deeper. So up to this point, we've explored the idea that consciousness may explored the idea that consciousness may not actually emerge from inside our not actually emerge from inside our brains. And this idea has actually been brains. And this idea has actually been around for quite a while. So pans around for quite a while. So pans psychism associated with philosophers psychism associated with philosophers like Philip Goff proposes that like Philip Goff proposes that consciousness is actually a fundamental consciousness is actually a fundamental feature of reality rather than something feature of reality rather than something that just magically pops into existence that just magically pops into existence once a brain becomes complicated enough once a brain becomes complicated enough to produce it. So this basically was a to produce it. So this basically was a reaction to the idea of physicalism reaction to the idea of physicalism which again is that consciousness is which again is that consciousness is formed from purely physical materials.

formed from purely physical materials. So evolutionarily for physicalism to be So evolutionarily for physicalism to be true that would mean that consciousness true that would mean that consciousness eventually evolved as neurons, brains eventually evolved as neurons, brains and the bodies became more complex and the bodies became more complex enough to develop consciousness. But the enough to develop consciousness. But the pansychist will say okay but still how pansychist will say okay but still how if the fundamental building blocks of if the fundamental building blocks of reality contain absolutely nothing reality contain absolutely nothing experiential whatsoever, how does experiential whatsoever, how does arranging enough of them together arranging enough of them together suddenly create experience? So instead suddenly create experience? So instead of trying to derive consciousness from of trying to derive consciousness from completely non-concious ingredients, completely non-concious ingredients, pansychism puts some primitive pansychism puts some primitive experiential property into reality from experiential property into reality from the very beginning. So interesting, but the very beginning. So interesting, but then that creates another question.

then that creates another question. If all of the fundamental pieces of If all of the fundamental pieces of reality do actually have tiny primitive reality do actually have tiny primitive forms of experience or consciousness, forms of experience or consciousness, how do trillions of those little how do trillions of those little experiences combine and actually form me experiences combine and actually form me or you? So from that then enter cosmos or you? So from that then enter cosmos psychism. So the idea that the universe psychism. So the idea that the universe itself is actually the fundamental itself is actually the fundamental conscious whole and then individual conscious whole and then individual consciousnesses are derived and consciousnesses are derived and partitioned out of that larger partitioned out of that larger consciousness. So this is talked a lot consciousness. So this is talked a lot about in spiritual and religious about in spiritual and religious communities and interestingly enough communities and interestingly enough people repeatedly experience a version people repeatedly experience a version of this when they take a psychedelic. So of this when they take a psychedelic. So one of the most common features of a one of the most common features of a highdosese psychedelic trip is highdosese psychedelic trip is experiencing a loss of the boundary experiencing a loss of the boundary between self and everything else. So between self and everything else. So people describe merging with the people describe merging with the universe or becoming one with nature universe or becoming one with nature which very much aligns with that idea of which very much aligns

with that idea of consciousness. But then we can go even consciousness. But then we can go even deeper and talk about quantum deeper and talk about quantum consciousness. So this one's a little consciousness. So this one's a little bit more controversial, but Roger bit more controversial, but Roger Penrose, who is a mathematical Penrose, who is a mathematical physicist, and Stuart Hammerhoff, who is physicist, and Stuart Hammerhoff, who is an anesthesiologist, which side note, I an anesthesiologist, which side note, I think anesthesiologists probably have think anesthesiologists probably have the most interesting thoughts about the most interesting thoughts about consciousness because they're literally consciousness because they're literally putting people to sleep and waking them putting people to sleep and waking them up all day long, but besides the point.

up all day long, but besides the point. So anyways, Penrose and Hammerhoff So anyways, Penrose and Hammerhoff developed a theory that consciousness is developed a theory that consciousness is actually produced via quantum processes actually produced via quantum processes inside microtubules, which are the tiny inside microtubules, which are the tiny protein structures inside of neurons. So protein structures inside of neurons. So this is definitely one of the more wild this is definitely one of the more wild theories out there, but Hammeroff again theories out there, but Hammeroff again being an anesthesiologist wanted to see being an anesthesiologist wanted to see if anesthesia interfered with the if anesthesia interfered with the microtubial processes that he thinks are microtubial processes that he thinks are actually involved in consciousness. And actually involved in consciousness. And it turns out that stabilizing those it turns out that stabilizing those microtubules in a 2026 mouse study did microtubules in a 2026 mouse study did actually change the sensitivity that the actually change the sensitivity that the mice had two inhaled anesthetics.

mice had two inhaled anesthetics. So very interesting does not prove So very interesting does not prove quantum consciousness over just a quantum consciousness over just a neurobiological understanding of neurobiological understanding of consciousness, but so fascinating to consciousness, but so fascinating to think about. Then another theory that think about. Then another theory that sounds equally as strange but is sounds equally as strange but is actually much more physically actually much more physically straightforward is electromagnetic field straightforward is electromagnetic field theories of consciousness. So every theories of consciousness. So every neuron communicates electrically and neuron communicates electrically and electrical currents generate electrical currents generate electromagnetic fields. So your brain is electromagnetic fields. So your brain is actually continuously producing a actually continuously producing a complex electromagnetic field. So we complex electromagnetic field. So we quite literally measure this with EEGs.

quite literally measure this with EEGs. So the thought is that the patterns of So the thought is that the patterns of these fields is actually what is these fields is actually what is corresponding to the actual experience corresponding to the actual experience of consciousness of consciousness and bringing in psychedelics again they and bringing in psychedelics again they profoundly change coordinated electrical profoundly change coordinated electrical activity within the brain and again we activity within the brain and again we quite literally see this with EEGs. So quite literally see this with EEGs. So interesting we're going to go a little interesting we're going to go a little bit deeper into these consciousness bit deeper into these consciousness theories and I promise we are almost theories and I promise we are almost done but we have to talk about Rupert done but we have to talk about Rupert Sheldrake's idea of morphic resonance.

Sheldrake's idea of morphic resonance.

DMT, Entities, and Altered Reality

So he hypothesizes that information is So he hypothesizes that information is not stored only inside an individual not stored only inside an individual organism but rather inside nature more organism but rather inside nature more broadly as this kind of collective broadly as this kind of collective memory. So completely taking memory. So completely taking consciousness outside of the brain or consciousness outside of the brain or the body itself. So wild how did he get the body itself. So wild how did he get here? So one way is that he thought here? So one way is that he thought about the fact that there are different about the fact that there are different patterns of ideas in life. So this patterns of ideas in life. So this becomes a little bit more tangible if we becomes a little bit more tangible if we think about how humans developed as a think about how humans developed as a species across the development of species across the development of civilization.

civilization. civilization. So once a pattern is established then So once a pattern is established then it's more likely to present itself to it's more likely to present itself to beings that can tap into that beings that can tap into that consciousness. So this is most obvious consciousness. So this is most obvious when we think about this idea of when we think about this idea of independent discovery throughout independent discovery throughout history. So scientists, leaders, history. So scientists, leaders, adventors across time have arrived at adventors across time have arrived at remarkably similar ideas at roughly the remarkably similar ideas at roughly the same time without any known direct same time without any known direct communication. So Darwin and Wallace communication. So Darwin and Wallace independently arrived at the idea of independently arrived at the idea of natural selection without communicating.

natural selection without communicating. And one argument to that is yes, people And one argument to that is yes, people living in the same era had access to living in the same era had access to similar knowledge, technology, and similar knowledge, technology, and problems. But Sheldrake postulates that problems. But Sheldrake postulates that what if there is this some kind of what if there is this some kind of sharedformational field that people are sharedformational field that people are actually unknowingly tapping into. And actually unknowingly tapping into. And psychedelics actually appear to present psychedelics actually appear to present a similar inquiry into all of this. So a similar inquiry into all of this. So across time, people who have never met across time, people who have never met one another report surprisingly one another report surprisingly recurrent psychedelic imagery. So recurrent psychedelic imagery. So geometric patterns, archetypal figures, geometric patterns, archetypal figures, and things that have all influenced art and things that have all influenced art in different cultures across time. So in different cultures across time. So this is kind of similar to the idea of this is kind of similar to the idea of Jung's idea of the collective Jung's idea of the collective unconscious, which I think is so unconscious, which I think is so fascinating. So he ended up working with fascinating. So he ended up working with patients with schizophrenia pretty early patients with schizophrenia pretty early in his career and then became fascinated in his career and then became fascinated by the reoccurring archetypal themes and by the reoccurring archetypal themes and symbols that these patients reported symbols that these patients reported that he later compared with myths and that he later compared with myths and ancient texts from different cultures ancient texts from different cultures across time. So if you have not read the across time. So if you have not read the red book that he wrote, definitely dive red book that he wrote, definitely dive into it because it is completely into it because it is completely fascinating. And he actually details so fascinating. And he actually details so later in his life and his career he later in his life and his career he deliberately engaged in his own vivid deliberately engaged in his own vivid fantasies and visions that were very fantasies and visions that were very schizophrenic like that he was able to schizophrenic like that he was able to enter enter and leave them at will. So enter enter and leave them at will. So not schizophrenic but all very not schizophrenic but all very interesting. So all of this together interesting. So all of this together Yung's idea what we just talked about Yung's idea what we just talked about really ties into one of the final really ties into one of the final consciousness theories ideas I'm going consciousness theories ideas I'm going to bring up but that is the transmission to bring up but that is the transmission theory of consciousness. So this idea theory of consciousness. So this idea and again this one is very much a theory and again this one is very much a theory is that instead of the brain producing is that instead of the brain producing consciousness, consciousness, consciousness, consciousness actually exists consciousness actually exists independently independently independently and the brain is merely a receiver. So and the brain is merely a receiver. So kind of like a radio and brain kind of like a radio and brain dependence alone does not actually tell dependence alone does not actually tell us whether the brain produces us whether the brain produces consciousness or it merely modulates it.

consciousness or it merely modulates it. So think about this way. If we damage So think about this way. If we damage the radio, the music gets distorted. If the radio, the music gets distorted. If we completely destroy the radio, the we completely destroy the radio, the music stops. Those two things does not music stops. Those two things does not mean that the music originated inside mean that the music originated inside the radio. So, the same could be true of the radio. So, the same could be true of our brain. Again, completely a theory, our brain. Again, completely a theory, but I think that one is so fascinating but I think that one is so fascinating to think about. And we certainly know to think about. And we certainly know that psychedelics change the filtering that psychedelics change the filtering and tuning mechanisms of the brain. So, and tuning mechanisms of the brain. So, could psychedelics be altering the could psychedelics be altering the receiver itself if this theory is indeed receiver itself if this theory is indeed true? So all so interesting, but for a true? So all so interesting, but for a second here, we're going to dig out of second here, we're going to dig out of the rabbit holes just a little bit the rabbit holes just a

little bit before we get into the DNT rabbit holes before we get into the DNT rabbit holes and think again about the larger and think again about the larger question at hand. Do psychedelics show question at hand. Do psychedelics show us more of reality rather than a us more of reality rather than a hallucination? So again, we know that hallucination? So again, we know that ordinary perception is filtered. We know ordinary perception is filtered. We know that psychedelics loosen those filters that psychedelics loosen those filters and they appear to allow more internally and they appear to allow more internally generated information through and generated information through and potentially more external sensory potentially more external sensory information to reach conscious awareness information to reach conscious awareness as well. And we still do not know if as well. And we still do not know if consciousness is actually a physical consciousness is actually a physical phenomenon that is produced in the phenomenon that is produced in the brain. That part is actually still a brain. That part is actually still a mystery even though there's mystery even though there's postulations.

postulations. postulations. So if we do actually entertain some of So if we do actually entertain some of these more quote unquote wild these more quote unquote wild consciousness theories out there. So if consciousness theories out there. So if consciousness truly is a field or is consciousness truly is a field or is shared and then transmitted into the shared and then transmitted into the brain, then perhaps psychedelics really brain, then perhaps psychedelics really are changing how we tap into this are changing how we tap into this consciousness or this quote unquote consciousness or this quote unquote reality. But then of course we have to reality. But then of course we have to ask what is reality? And maybe reality ask what is reality? And maybe reality actually is what we do collectively actually is what we do collectively agree upon. So if that is the case then agree upon. So if that is the case then sure what psychedelics show us is not sure what psychedelics show us is not reality cuz it's not what we're all reality cuz it's not what we're all agreeing upon. But are they showing us agreeing upon. But are they showing us more of what is actually out there? So more of what is actually out there? So now this finally leads us directly into now this finally leads us directly into DMT. So DMT is one of the classic DMT. So DMT is one of the classic psychedelics and it's actually one of psychedelics and it's actually one of the active ingredients in iawaska and the active ingredients in iawaska and it's also the psychedelic that is it's also the psychedelic that is classically associated with people classically associated with people actually experiencing and seeing actually experiencing and seeing external beings. So people report elves, external beings. So people report elves, gnomes, other little beings that they gnomes, other little beings that they report as feeling realer than real. So report as feeling realer than real. So backing up just a little bit, DMT is one backing up just a little bit, DMT is one of the classic psychedelics, so acts on of the classic psychedelics, so acts on the serotonin 2a receptor and a lot of the serotonin 2a receptor and a lot of people actually also describe it as the people actually also describe it as the spirit molecule because it's actually spirit molecule because it's actually been detected naturally in the human been detected naturally in the human body. And there's this very popular body. And there's this very popular theory that it is thought to be released theory that it is thought to be released from our pineal gland when we die or from our pineal gland when we die or have a near-death experience. And I will have a near-death experience. And I will clearly state this is actually a clearly state this is actually a speculation. It is not proven despite speculation. It is not proven despite how people describe it online. So we how people describe it online. So we don't know yet. But going back to DMT, don't know yet.

Indigenous Traditions and Psychedelic Meaning

But going back to DMT, when people actually take DMT, the when people actually take DMT, the reports of what people experience are so reports of what people experience are so vivid, frequent, and consistent amongst vivid, frequent, and consistent amongst users that now major universities are users that now major universities are actually starting to study them. So, actually starting to study them. So, John's Hopkins actually published a John's Hopkins actually published a survey study in 2020 and looked at over survey study in 2020 and looked at over 200 people who experienced seeing an 200 people who experienced seeing an autonomous entity on DMT. And no autonomous entity on DMT. And no surprise, they found remarkably surprise, they found remarkably consistent themes. So these entities consistent themes. So these entities were usually experienced as conscious were usually experienced as conscious intelligent intelligent intelligent and communication with these beings was and communication with these beings was actually pretty common and again people actually pretty common and again people described these encounters as feeling described these encounters as feeling more real than ordinary waking life.

more real than ordinary waking life. Then there was a 2021 naturalistic study Then there was a 2021 naturalistic study led by the University of Greenwitch led by the University of Greenwitch Imperial College of London affiliation Imperial College of London affiliation that took it a step further. So they that took it a step further. So they actually interviewed people immediately actually interviewed people immediately following a DMT experience. So this following a DMT experience. So this study was much smaller, 36 people in study was much smaller, 36 people in total, but 94% of them reported total, but 94% of them reported experiencing these entities. And then experiencing these entities. And then this year again June 2026, a paper was this year again June 2026, a paper was published in neuroscience of published in neuroscience of consciousness that asked whether consciousness that asked whether conventional predictive processing which conventional predictive processing which we explored earlier and again is a more we explored earlier and again is a more widely accepted neuroscience explanation widely accepted neuroscience explanation of how we experience the world. So they of how we experience the world. So they asked could predictive processing asked could predictive processing generate something that feels generate something that feels autonomous, intelligent, external and autonomous, intelligent, external and real. So could this happen with our real. So could this happen with our current modern neuroscience current modern neuroscience understanding of consciousness? So understanding of consciousness? So basically they took a neuroscience basically they took a neuroscience explanation. So they wanted to look into explanation. So they wanted to look into these DMT entities and the paper was these DMT entities and the paper was titled computational spirits a titled computational spirits a neuroscientific account of psychedelic neuroscientific account of psychedelic entity encounters. So they looked at all entity encounters. So they looked at all of the DMT studies and all the prior of the DMT studies and all the prior studies that explain what we know about studies that explain what we know about psychedelics particularly the reebus psychedelics particularly the reebus model which we talked about and then model which we talked about and then built this theoretical synthesis. So built this theoretical synthesis. So here is the proposed mechanism that they here is the proposed mechanism that they came up with. First DMT does came up with. First DMT does stabilize our normal top- down model of reality.

our normal top- down model of reality. So again going back to that predictive So again going back to that predictive processing and reebus model. So processing and reebus model. So information that would normally get information that would normally get suppressed or ignored whether that suppressed or ignored whether that information is coming from sensory information is coming from sensory input, our imagination, memory, input, our imagination, memory, unconscious, mind, body, whatever it may unconscious, mind, body, whatever it may be, then that can that information can be, then that can that information can suddenly become more prominent into our suddenly become more prominent into our conscious awareness. So again, the real conscious awareness. So again, the real question is where is the information for question is where is the information for these supposedly autonomous beings these supposedly autonomous beings actually coming from? So the authors actually coming from? So the authors postulate using a term they call postulate using a term they call epistemic. So imagine you're epistemic. So imagine you're looking at some random static on a TV and then some random static on a TV and then compare how that feels to what it feels compare how that feels to what it feels like to have a conversation with another like to have a conversation with another person in real life. So the other person person in real life. So the other person is saying things that you did not is saying things that you did not predict in your mind. This other person predict in your mind. This other person is responding to you. They have their is responding to you. They have their own intentions and they have a mind that own intentions and they have a mind that is not your mind. So your brain is not your mind. So your brain interprets all of that complexity and interprets all of that complexity and unpredictability of another person as unpredictability of another person as evidence that there is another mind out evidence that there is another mind out there. And humans are actually really there. And humans are actually really good at detecting other minds or beings.

good at detecting other minds or beings. So we are constantly inferring So we are constantly inferring intentions from movement and trying to intentions from movement and trying to figure out what people are thinking and figure out what people are thinking and why they're behaving in that way. It why they're behaving in that way. It helps us survive and interact with them.

helps us survive and interact with them. So the authors of this paper proposed So the authors of this paper proposed that under DMT when the brain is that under DMT when the brain is suddenly confronted with incredibly rich suddenly confronted with incredibly rich and difficult to explain information, and difficult to explain information, one of the models it reaches for is one of the models it reaches for is there is an intelligent agent causing there is

an intelligent agent causing all of this. So fascinating, really cool all of this. So fascinating, really cool neuroscience explanation, but it still neuroscience explanation, but it still does not explain the strangest part. Why does not explain the strangest part. Why does the entity feel completely separate does the entity feel completely separate from you?

from you? So quite literally external to you and So quite literally external to you and having a conversation with you. And they having a conversation with you. And they actually did dig into this through the actually did dig into this through the lens of sensory attenuation.

lens of sensory attenuation. So again, normally your brain is So again, normally your brain is constantly predicting the consequences constantly predicting the consequences of things that you generate yourself. So of things that you generate yourself. So if you move your hand, your brain knows if you move your hand, your brain knows what caused that. If you are imagining what caused that. If you are imagining things, daydreaming, you're creating an things, daydreaming, you're creating an image in your mind, your brain still image in your mind, your brain still knows that that image came from you. But knows that that image came from you. But psychedelics do appear to interfere with psychedelics do appear to interfere with that whole process. So if we put those that whole process. So if we put those two things together, this being seems two things together, this being seems intelligent.

intelligent. intelligent. I don't feel like I'm creating it. Your I don't feel like I'm creating it. Your brain's best explanation is okay, brain's best explanation is okay, there's something else here. So maybe, there's something else here. So maybe, yeah, maybe neuroscience explains that a yeah, maybe neuroscience explains that a little bit. However, even the authors of little bit. However, even the authors of this paper admit that all of this, all this paper admit that all of this, all of this neuroscience explanation still of this neuroscience explanation still does not actually answer whether the does not actually answer whether the entity is real. They actually even state entity is real. They actually even state that this framework could actually work that this framework could actually work in the opposite direction too. So if in the opposite direction too. So if these beings are externally present and these beings are externally present and real, it would actually make sense that real, it would actually make sense that during normal waking consciousness, our during normal waking consciousness, our brain carries out an incredibly strong brain carries out an incredibly strong prior and tells us things like these prior and tells us things like these things do not exist. So if that were the things do not exist. So if that were the case, then they would actually not ever case, then they would actually not ever reach conscious awareness. So reach conscious awareness. So ultimately, bottom line, we still do not ultimately, bottom line, we still do not know, but I think it is fascinating to know, but I think it is fascinating to think about. Okay, so next we are going think about. Okay, so next we are going to zoom way out and talk about culture to zoom way out and talk about culture and history because in reality humans and history because in reality humans have been saying all this stuff for a have been saying all this stuff for a very long time. So people have been very long time. So people have been using altered states psychedelic or not using altered states psychedelic or not to expand their knowing beyond ordinary to expand their knowing beyond ordinary consciousness. And what I think is quite consciousness. And what I think is quite interesting is that in some traditional interesting is that in some traditional healing rituals in the Amazon, it was healing rituals in the Amazon, it was actually the healer that took the actually the healer that took the iawaska and not the patient so that the iawaska and not the patient so that the healer could interact with the plant and healer could interact with the plant and spirit allies to receive information spirit allies to receive information about the illness of their patient so about the illness of their patient so that they could determine what treatment that they could determine what treatment or song or whatever it was was needed.

or song or whatever it was was needed. Then we can look to Mazitech mushroom Then we can look to Mazitech mushroom traditions in Mexico. So Maria Sabina traditions in Mexico. So Maria Sabina very famously accounted that these very famously accounted that these psychedelic mushrooms allowed them to psychedelic mushrooms allowed them to interact with powerful beings that they interact with powerful beings that they called principal ones. We can also think called principal ones. We can also think about the wixar relationship with peyote about the wixar relationship with peyote that shows us a different but pretty that shows us a different but pretty related idea as well. So the peyote related idea as well. So the peyote cactus was embedded with pilgrimage and cactus was embedded with pilgrimage and sacred places and the peyote itself is sacred places and the peyote itself is described as facilitating this kind of described as facilitating this kind of seeing or communication with ancestors seeing or communication with ancestors and deities. So many different and deities. So many different traditions but

the same recurring traditions but the same recurring features are described with interaction features are described with interaction of the psychedelic plants. So again loss of the psychedelic plants. So again loss or expansion of the normal self or expansion of the normal self sacredness encounters with some kind of sacredness encounters with some kind of other presence or intelligence or this other presence or intelligence or this knowetic quality about them. So the knowetic quality about them. So the feeling that you did not simply feeling that you did not simply experience something you actually experience something you actually learned something even if you can't learned something even if you can't explain what you learned. And explain what you learned. And interestingly enough, even modern interestingly enough, even modern psychedelic research now increasingly psychedelic research now increasingly includes a validated mystical experience includes a validated mystical experience questionnaire, the MEQ, as part of their questionnaire, the MEQ, as part of their data collection to better understand data collection to better understand these shared experiences. And I also these shared experiences.

CIA Experiments and Remote Viewing

And I also think it's interesting to think about think it's interesting to think about what kind of deities or encounters what kind of deities or encounters people experience based on their prior people experience based on their prior beliefs. So, for example, a Christian beliefs. So, for example, a Christian might encounter Jesus. A Mazitech healer might encounter Jesus. A Mazitech healer is probably more likely to encounter the is probably more likely to encounter the principal ones because that's what principal ones because that's what they've experienced and heard about.

they've experienced and heard about. Someone who spent six months on DMT Someone who spent six months on DMT Reddit might encounter aliens or machine Reddit might encounter aliens or machine elves or something that looks like elves or something that looks like psychedelic art that they saw on these psychedelic art that they saw on these Reddit threads. So, even though people Reddit threads. So, even though people experience what they're culturally experience what they're culturally conditioned to experience, I actually conditioned to experience, I actually don't think that that dismisses or don't think that that dismisses or actually explains away these quote actually explains away these quote unquote other beings encountered. I unquote other beings encountered. I think it's pretty obvious that of course think it's pretty obvious that of course culture and prior experiences will culture and prior experiences will influence the interpretation of these influence the interpretation of these beings. But perhaps they really are all beings. But perhaps they really are all the same thing, but we're just the same thing, but we're just interpreting them and perceiving them interpreting them and perceiving them differently. Ultimately, of course, we differently. Ultimately, of course, we have no idea. But do you know who else have no idea. But do you know who else was completely fascinated by this and was completely fascinated by this and ran experience on people to figure out ran experience on people to figure out the answers to some of these questions?

the answers to some of these questions? The CIA. So for decades, different The CIA. So for decades, different branches of the US intelligence branches of the US intelligence community were asking versions of the community were asking versions of the same questions that we have been talking same questions that we have been talking about throughout this episode. So can about throughout this episode. So can altered states change what information altered states change what information the mind has access to. Can the mind has access to. Can consciousness do things that our normal consciousness do things that our normal understanding of the brain says that it understanding of the brain says that it should not be able to do? And of course, should not be able to do? And of course, because this was during the cold war, because this was during the cold war, can we somehow use any of this for can we somehow use any of this for intelligence? So the CIA actually intelligence? So the CIA actually experimented with drugs, psychedelics, experimented with drugs, psychedelics, hypnosis, interrogation, and behavioral hypnosis, interrogation, and behavioral control. So this began with programs control. So this began with programs like Bluebird and Artichoke in the early like Bluebird and Artichoke in the early 1950s and then eventually became the 1950s and then eventually became the more famous MK Ultra programs. And this more famous MK Ultra programs. And this is not a conspiracy theory. These files is not a conspiracy theory. These files are now declassified and you can are now declassified and you can actually view the files on the CIA actually view the files on the CIA website. So the CIA funded research website. So the CIA funded research involving LSD, hypnosis, mind control, involving LSD, hypnosis, mind control, and a lot of the experiments involved and a lot of the experiments involved using people who did not consent and who using people who did not consent and who had no idea that they had actually been had no idea that they had actually been given psychoactive drugs. And these

given psychoactive drugs. And these experiments were happening all over. So experiments were happening all over. So universities, hospitals, prisons, and universities, hospitals, prisons, and other organizations.

other organizations. And this is all just what we know from And this is all just what we know from what is left of the documents. So, in what is left of the documents. So, in the 70s, most of the MK Ultra the 70s, most of the MK Ultra documentation was deliberately destroyed documentation was deliberately destroyed by orders from senior CIA officials. So, by orders from senior CIA officials. So, I don't want to go too deep down this I don't want to go too deep down this rabbit hole cuz we'll get lost in the rabbit hole cuz we'll get lost in the weeds a little bit here and there's a weeds a little bit here and there's a lot to explore, but I do want to explain lot to explore, but I do want to explain a few relevant things that is pertinent a few relevant things that is pertinent to this episode. So the question that to this episode. So the question that was really on the mind of the CIA and was really on the mind of the CIA and actually quite a larger population than actually quite a larger population than just the government back then was what just the government back then was what if the mind can actually obtain if the mind can actually obtain information from other means other than information from other means other than our five senses? And one of the people our five senses? And one of the people who really chased this question down and who really chased this question down and dedicated much of his life to finding dedicated much of his life to finding the answer was Dr. Andrew Bharich. So he the answer was Dr. Andrew Bharich. So he was an actual medical doctor, a was an actual medical doctor, a physician. He actually went to physician. He actually went to Northwestern for medical school, but his Northwestern for medical school, but his career took a wildly different turn than career took a wildly different turn than what he initially went to school for. So what he initially went to school for. So he became interested in telepathy, ESP, he became interested in telepathy, ESP, which is extra sensory perception, which is extra sensory perception, altered states, and he actually did altered states, and he actually did explore psychedelic mushrooms decades explore psychedelic mushrooms decades before psychedelics actually became part before psychedelics actually became part of mainstream medical research. And as a of mainstream medical research. And as a quick recap of the arc of psychedelic quick recap of the arc of psychedelic medicine, psychedelics actually were medicine, psychedelics actually were used in medical research for mental used in medical research for mental health prior to their ban in the 1970s.

health prior to their ban in the 1970s. Then of course they were banned and then Then of course they were banned and then just started to become resurfaced in the just started to become resurfaced in the medical research in the '90s. And of medical research in the '90s. And of course in the last 10 years research has course in the last 10 years research has just boomed. But anyways back to just boomed. But anyways back to Bharich. So he was involved in private Bharich. So he was involved in private research funded by wealthy socialites in research funded by wealthy socialites in an organization called the roundt an organization called the roundt foundation and served in the army foundation and served in the army medical corpse at the army chemical medical corpse at the army chemical center. And a lot of his work appears center. And a lot of his work appears throughout all of these declassified throughout all of these declassified government files. and his research was government files. and his research was actually quite fascinating. So if you actually quite fascinating. So if you want to go down this rabbit hole, check want to go down this rabbit hole, check out the book Phenomena by Annie Jacobson out the book Phenomena by Annie Jacobson or the upcoming documentary called Mind or the upcoming documentary called Mind Traveler by Greg Malazi, but separately.

Traveler by Greg Malazi, but separately. Beginning around 1972, the CIA started Beginning around 1972, the CIA started to fund more specific research at the to fund more specific research at the Stanford Research Institute, SRRI, Stanford Research Institute, SRRI, around remote viewing. So quite around remote viewing. So quite literally using psychics to spy on literally using psychics to spy on people around the world. And you can people around the world. And you can actually read all of this in the actually read all of this in the declassified files and they actually declassified files and they actually report enough apparently successful report enough apparently successful results that the government kept funding results that the government kept funding the work and later developed structured the work and later developed structured training programs to teach people how to training programs to teach people how to do this that weren't actually psychics do this that weren't actually psychics to begin with. Then eventually what I to begin with. Then eventually what I think is actually the most fascinating think is actually the most fascinating was the US Army's exploration into what was the US Army's exploration into what is called gateway process which is is called gateway process which is actually a real consciousness training actually a real consciousness training program developed by Robert Monroe and program developed by Robert Monroe and the

Monroe Institute and they used the Monroe Institute and they used guided meditation deep relaxation guided meditation deep relaxation visualization and what they called visualization and what they called hemisync so kind of like binaural beats hemisync so kind of like binaural beats to get people into these deep altered to get people into these deep altered states of consciousness while the person states of consciousness while the person was completely consciously aware. So was completely consciously aware. So this was sort of that. So this was sort this was sort of that. So this was sort of a non-drug attempt to deliberately of a non-drug attempt to deliberately alter consciousness. And in 1983, an alter consciousness. And in 1983, an army intelligence officer was actually army intelligence officer was actually tasked in assessing how gateway process tasked in assessing how gateway process may theoretically work. And so he did may theoretically work. And so he did this whole deep dive, this whole this whole deep dive, this whole research experience he pulled from research experience he pulled from neuroscience, our understanding of neuroscience, our understanding of hypnosis, quantum mechanics, and a hypnosis, quantum mechanics, and a proposed holographic model of the proposed holographic model of the universe. And he actually concluded that universe. And he actually concluded that he thought that there was actually he thought that there was actually rational basis to investigate it rational basis to investigate it further. And he even entertained the further. And he even entertained the possibility that consciousness might not possibility that consciousness might not be completely confined to the physical be completely confined to the physical brain. And you can read this stuff. I'm brain. And you can read this stuff. I'm not making this up. This is not a not making this up. This is not a conspiracy theory. You can actually read conspiracy theory. You can actually read this on the CIA website. So fascinating.

this on the CIA website. So fascinating. Then we get to Stargate, which is the Then we get to Stargate, which is the more official remote viewing programs more official remote viewing programs that continued into the 1990s.

that continued into the 1990s. So millions of dollars were spent on So millions of dollars were spent on this type of research. So military and this type of research. So military and intelligence personnel were trained on intelligence personnel were trained on remote viewing to spy on other remote viewing to spy on other countries. So all this continued for a countries. So all this continued for a while. Then eventually after 20 years of while.

What Psychedelics Reveal About Reality

Then eventually after 20 years of this work, the CIA commissioned an this work, the CIA commissioned an independent evaluation to actually independent evaluation to actually determine if all of this stuff did determine if all of this stuff did actually work. So first they brought in actually work. So first they brought in a statistician who did actually conclude a statistician who did actually conclude that the statistical results could not that the statistical results could not actually be explained by chance alone.

actually be explained by chance alone. They also brought in a psychologist who They also brought in a psychologist who did argue that the evidence was not did argue that the evidence was not independently replicated strongly independently replicated strongly enough. So ultimately from that side of enough. So ultimately from that side of things, we cannot actually prove things, we cannot actually prove anything. So again, ultimately like the anything. So again, ultimately like the rest of this podcast, we still don't rest of this podcast, we still don't fully know. The government spent a lot fully know. The government spent a lot of time and money investigating this and of time and money investigating this and theoretically never solve the problem.

theoretically never solve the problem. At least from what we know from these At least from what we know from these now declassified older files, we have no now declassified older files, we have no idea what's actually going on now. I idea what's actually going on now. I think it's fun to think about, but I think it's fun to think about, but I personally think the question that still personally think the question that still remains is how would we know if an remains is how would we know if an altered state is showing us something altered state is showing us something made up or just outside of our normal made up or just outside of our normal model of reality? Which then leads me to model of reality? Which then leads me to a bigger question. How confident should a bigger question. How confident should we be that our normal model of reality we be that our normal model of reality is actually quote unquote reality in the is actually quote unquote reality in the first place? And I personally think first place? And I personally think whatever reality ultimately is, we are whatever reality ultimately is, we are not experiencing all of it. Your brain not experiencing all of it. Your brain is not passively recording the world is not passively recording the

world around you like a video camera. And that around you like a video camera. And that actually is a well-established actually is a well-established neuroscience perspective. What it's neuroscience perspective. What it's actually doing is taking a comparatively actually doing is taking a comparatively tiny amount of available information, tiny amount of available information, filtering it through your senses, filtering it through your senses, combining it with memory, expectation, combining it with memory, expectation, attention, and prediction, and then attention, and prediction, and then constructing that experience that we all constructing that experience that we all call quote unquote reality. So there is call quote unquote reality. So there is actually no color red floating around in actually no color red floating around in the outside world. There are wavelengths the outside world. There are wavelengths of electromagnetic radiation that your of electromagnetic radiation that your visual system takes in so that you visual system takes in so that you subjectively experience the color red.

subjectively experience the color red. But again, what produces that subjective But again, what produces that subjective experience? Then think about sound. We experience? Then think about sound. We absolutely know that there is sound that absolutely know that there is sound that is too high or too low for us to is too high or too low for us to actually hear. We also know that there's actually hear. We also know that there's light that we cannot see like infrared light that we cannot see like infrared light. And then of course, even the light. And then of course, even the sensory input that we can physically sensory input that we can physically detect, most of it never actually detect, most of it never actually reaches conscious awareness. So reaches conscious awareness. So ultimately, ordinary waking ultimately, ordinary waking consciousness is already a filter, a consciousness is already a filter, a controlled hallucination.

controlled hallucination. So what exactly are we filtering? And of So what exactly are we filtering? And of course, what actually is consciousness? course, what actually is consciousness?

Psychedelics may be showing us more of Psychedelics may be showing us more of reality and the neuroscience is giving reality and the neuroscience is giving us very plausible mechanisms for how all us very plausible mechanisms for how all of those things happen, but explaining of those things happen, but explaining how the brain processes an experience how the brain processes an experience does not ultimately tell us what caused does not ultimately tell us what caused the experience itself. So if I look at the experience itself. So if I look at an actual tree, yes, there will be an actual tree, yes, there will be neural activity associated with seeing a neural activity associated with seeing a tree. If I dream about a tree, there tree. If I dream about a tree, there will also be neural activity associated will also be neural activity associated with that tree. If I hallucinate a tree with that tree. If I hallucinate a tree under psychedelics or not, there will under psychedelics or not, there will also be neural activity associated with also be neural activity associated with a tree. What differs is where that a tree. What differs is where that information is coming from. And information is coming from. And psychedelic science has not given us psychedelic science has not given us that answer yet. So it's possible that that answer yet. So it's possible that they are allowing normally unconscious they are allowing normally unconscious information from inside the brain to information from inside the brain to flood into our awareness that we may flood into our awareness that we may call a hallucination. And I think we can call a hallucination. And I think we can say with almost certainly this is say with almost certainly this is happening in some part. But are they happening in some part. But are they also changing sensory processing so that also changing sensory processing so that we notice aspects of the external world we notice aspects of the external world that we would normally suppress? I think that we would normally suppress? I think also probably. Could they also somehow also probably. Could they also somehow allow access to information that falls allow access to information that falls outside of our current model of outside of our current model of perception altogether?

perception altogether? Maybe ultimately we don't know yet. But Maybe ultimately we don't know yet. But from everything that we do know now, I from everything that we do know now, I don't think our primary question itself don't think our primary question itself is as absurd as it sounds without is as absurd as it sounds without context. And remember that humans have context. And remember that humans have been asking versions of this question been asking versions of this question for thousands of years. So people across for thousands of years. So people across radically different cultures have radically different cultures have entered altered states and returned entered altered states and returned believing that they have encountered believing that they have encountered ancestors, spirits, gods, plants, ancestors, spirits, gods, plants, intelligence, all these things that they intelligence, all these things that they don't think that came from their don't think that came from their ordinary mind. So maybe

psychedelics are ordinary mind. So maybe psychedelics are not showing us some hidden objective not showing us some hidden objective quote unquote true reality. Maybe they quote unquote true reality. Maybe they are showing us how much stranger are showing us how much stranger perception itself is. Or maybe when we perception itself is. Or maybe when we loosen the filters that create ordinary loosen the filters that create ordinary waking consciousness, we actually waking consciousness, we actually occasionally do gain access to occasionally do gain access to information that is usually unavailable information that is usually unavailable to us. Either way, I will leave you all to us. Either way, I will leave you all with this. There is a difference between with this. There is a difference between the brain created this and the brain the brain created this and the brain perceived this. And the answer to the perceived this. And the answer to the question of the title of this episode, question of the title of this episode, do psychedelics show us more of reality?

do psychedelics show us more of reality? Maybe. But how do we actually know the Maybe. But how do we actually know the difference between hallucination and a difference between hallucination and a reality? And ultimately, what is reality? And ultimately, what is reality? Okay, so a little bit weird reality? Okay, so a little bit weird one, a little bit trippier one, but one, a little bit trippier one, but thank you for listening to the trip lab.

thank you for listening to the trip lab. If you enjoyed this episode, please take If you enjoyed this episode, please take a second to rate the show, subscribe, or a second to rate the show, subscribe, or share it with someone who would also share it with someone who would also love going down all these weird trippy love going down all these weird trippy rabbit holes. It really does help the rabbit holes. It really does help the show out more than you know. And if you show out more than you know. And if you want to go deeper, you can find the trip want to go deeper, you can find the trip lab and my newsletter between mind and lab and my newsletter between mind and body on Substack at dr body on Substack at dr miela.substack.com.

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