This wasn’t an easy journey for me. I clung to my old story about my depression being caused by my brain being broken. I fought for it. I refused for a long time to see the evidence they were presenting to me. This wasn’t a warm slide into a different way of thinking. It was a fight. — Johann Hari

Johann Hari is the author of two New York Times best-selling books. His first, ‘Chasing the Scream: the First and Last Days of the War on Drugs’, is currently being adapted into a major Hollywood feature film, and into a non-fiction documentary series. His most recent book, ‘Lost Connections’, has been praised by a very broad range of people, from Hillary Clinton to Tucker Carlson, from Elton John to Naomi Klein. He gave one of the most-viewed TED talks of all time and has written over the past seven years for some of the world’s leading newspapers and magazines, including the New York Times, the Los Angeles Times, the Guardian, the Spectator, Le Monde Diplomatique, the Melbourne Age, and Politico. He is a regular panelist on HBO’s Realtime With Bill Maher and was twice named ‘National Newspaper Journalist of the Year’ by Amnesty International.

I don’t believe people are looking for the meaning of life as much as they are looking for the experience of being alive. – Joseph Campbell

It seems that stories about homecomings follow me everywhere. I invited Johann onto Hidden Forces after hearing him on an episode of Sam Harris’ Waking Up podcast. I don’t remember what it was that drew me to him, other than that I found his message compelling. What was his message?

Now that I’ve finished reading Lost Connections, I believe the message that Johann is here to deliver is that anxiety and depression are not signs of a broken brain. They are the signs of a broken society. They are not malfunctions caused by chemical deficiencies, but rather a healthy body’s response to a deficient society. It is not we who are sick. It is the world we inhabit that has become increasingly ill and hostile. Depression and anxiety are evidence of something profoundly wrong with how we live, empty of human values, removed from meaningful work, apart from each other and from ourselves. It’s not serotonin; it’s society. The symptoms are a signal. We can try to muffle
that signal with drugs, possessions, and more junk values, but this won’t solve the problem. It will only make it worse. We need to listen to what the signal is saying and let it guide us away from the things that are hurting and draining us and towards the things that will meet our true needs.

Many of us can feel that things have gone horribly wrong in the world today. Life often, for many, feels needlessly destitute, stripped of meaning and full of poisonous messages, images, and junk values. Many have not known any other way. Others may remember things having been different, but often doubt their memory as time moves by and as some find themselves increasingly lost beneath the rubble of a dilapidated life. The anxiety and depression that so many of us feel at different moments and in different degrees is a signal. It’s a sign, pointing us back home. We don’t need to live our lives in detached from the things that make us human. In plain fact, we can’t.

This subject is important to me, because I have experienced periods of grief, sadness, and suffering in my own life. I spent most of my early years living with unbounded levels of anxiety and bouts of sadness and grief that I was at a loss to explain or even acknowledge. Feeling sad was normal. I didn’t know what to do with happiness when it came, or maybe, I didn’t trust that it would stay. It took many of the things that Johann highlights in his book for things to change in my life, for me to learn how to laugh again after years of sadness. This show has been part of that long journey back to childhood – to where I first began to see myself as broken, separate, and unworthy of love and affection. I hope that my conversation with Johann can help spread the light of this book. Its message is desperately needed.

**THE SCIENCE OF ANTIDEPRESSANTS**

**The Placebo:** You open the first chapter with the story of Elisha Perkins’ “tractor,” which you refer to eponymously in the chapter’s title as “the wand.” It was a thick, metal rod that was run over the patient’s body without ever touching him/her. The claim was that it would draw the sickness out of their bodies and expel it into the air. In an effort to understand how this wand worked, doctor John Haygarth decided to run an experiment. He created a fake “tractor” made of wood, but coated with metal so as to appear identical to Perkins’ wand. The fake tractor had the same results as the original. This, of course, is what is known as the placebo effect, and it lead you to your commentary on the work of Irving Kirsch, who is famous for his research on placebo effects and antidepressants. Irving, along with the help of his graduate student Guy Sapirstein, began comparing the results for antidepressants from every study that had ever been published and came to a shocking conclusion. The numbers showed that 25 percent of the effects of antidepressants were due to natural recovery, 50 percent were due to the story you had been told about them, and only 25 percent to the actual chemicals.
The Bias: Apparently, if you want to release a drug onto the U.S. market, you have to apply to the Food and Drug Administration (FDA), the official drug regulator. As part of your application, you have to submit all the trials you have conducted, in full—whether they’re good or bad for your profit margin. Irving learned that the drug companies had—for years—been selectively publishing research, and to a greater degree than he expected. For example, in one trial for Prozac, the drug was given to 245 patients, but the drug company published the results for only twenty-seven of them. Those twenty-seven patients were the ones the drug seemed to work for. According to Professor John Ioannidis, who the Atlantic Monthly has said “may be one of the most influential scientists alive,” explains that the rules and regulations are designed to make it extraordinarily easy for drug companies to get a drug approved. All you have to do is produce two trials—anytime, anywhere in the world—that suggest some positive effect of the drug. If there are two, and there is some effect, that’s enough. So you could have a situation in which there are one thousand scientific trials, and 998 find the drug doesn’t work at all, and two find there is a tiny effect—and that means the drug will be making its way to your local pharmacy.

The Results: According to Irving and Guy, antidepressants do cause an improvement in the Hamilton score—they do make depressed people feel better. It’s an improvement of 1.8 points. That’s a third less than getting better sleep. And yet, the side-effects are very real.

The Imbalance: According to Irving, the theory that depression and anxiety are caused by a “chemical imbalance” in the brain is totally unsubstantiated. In fact, there doesn’t even seem to be a scientific understanding of what a “chemically balanced” even looks like. In short, the scientists that he cites in the book call the theory everything from “a lie” to “a myth” to “bullshit.”

The Criticisms: The criticisms that Hari puts forward to Irving’s research are mainly channeling those of Dr. Peter Kramer, and they consist of three main points. The first criticism that Kramer puts forward is that Irving was not giving antidepressants enough time—it that the clinical trials he has analyzed typically last for four to eight weeks—but that it takes longer for these drugs to work.
Irving found two trials in which the drug trials lasted longer and found that in the first trial, the placebo did as well as the drug and that in the second trial, it outperformed the drug. The second objection Kramer made was to say that Irving was lumping severely depressed people in with moderately depressed people, and that this was a mistake, because these drugs were most effective on severely depressed people. When Irving looked over the data, he found that, with a single exception, he had looked only at studies of people classed as having very severe depression.

The third criticism was the most devastating, but not for the reasons one would expect. After looking deep into the methodology used for these studies, Peter Kramer concluded that the results from clinical trials of antidepressants—all the data we have—are meaningless, and that Irving built his conclusion that their effect is very small (at best) on a heap of garbage. The trials themselves are fraudulent, Kramer declared. The implications of this are obvious. If the integrity of the trial data cannot be relied upon in order to debunk claims from the initial findings, then neither can the initial findings be used to make claims in support of anti-depressants working in the first place. In other words, the entire edifice of scientific research upon which Peter Kramer and other early advocates of anti-depressants have relied to justify their prescriptions are untrustworthy and totally unreliable.

THE EXCEPTIONS

The Grief Exception: Diagnostic and Statistical Manual (DSM). Looking for context. “What is happening in the person’s life?” Q: What is the grief exception, and how did it create the pathway for you to ask the larger question of “what if depression is, in fact, a form of grief for our own lives not being as they should be? What if it is a form of grief for the connections we have lost, yet still need?”

The Environment: Sociologist George Brown conducted a scientific investigation into depressed and highly anxious people in the South London district of Camberwell on two different groups of depressed women. He concluded that “clinical depression is an understandable response to adversity,” and that when it comes to depression and anxiety, “paying attention to a person’s environment may turn out to be at least as effective as physical treatment.”

DISCONNECTION: NINE CAUSES OF DEPRESSION AND ANXIETY

Disconnection from Meaningful Work: Q: What did you learn through your research about the importance of meaningful work? Q: What makes work meaningful? Q: What is it about finding meaning in our work that is a natural antidote to depression and anxiety?

Disconnection from Other People: Q: What does it mean to “be alone” or to “be lonely?” It seems that some of the loneliest people you will find live in cities jam-packed with people. Q: Is there a difference between “being alone” and “feeling alone?” What causes someone to “feel alone?” You write in the book that: “To end
loneliness, you need other people—plus something else. You also need to feel you are sharing something with the other person, or the group, that is meaningful to both of you. You have to be in it together—and ‘it’ can be anything that you both think has meaning and value. When you’re in Times Square on your first afternoon in New York, you’re not alone, but you feel lonely because nobody there cares about you, and you don’t care about them. You aren’t sharing your joy or your distress. You’re nothing to the people around you, and they’re nothing to you.”

Q: What has been the impact of social media on creating the illusion of social connection, falsely compensating our loneliness with greater degrees of isolation—what Sherry Turkle calls being “alone together”?

Q: How has the significance of deterioration in community gone unrecognized for so long?

Q: How did the deterioration start and how/why did we come to believe that we could live without community?

Disconnection from Meaningful Values: You write in the book that something akin to eating a junk food diet (inspired by your own experience getting fat off KFC) is happening to us on an emotional level as a result of a diet of “junk values.” You went to see a psychologist named Tim Kasser, who discovered this theory.

Q: What sorts of studies did Tim conduct and what did he find?

Q: What was it about materialistic people that made them feel sick (and how did he define “materialistic”).

Q: What did his research say about “intrinsic” and “extrinsic” values and the conflicts between them?

Q: How have past generations learned and developed their own value systems and what accounts for the differences in ours?

Q: What does our society tell people? Q: What do we value as a society? ***How did we get these values and what are they??

Tim identified FOUR key reasons why junk values make us feel so bad. (1) The first is that thinking extrinsically poisons our relationships with other people. Q: How does it do this? (2) The second reason is somewhat obvious, which is that doing things not because you enjoy them, but in order to achieve some other objective doesn’t allow you to live in or enjoy the moment and achieve states of flow) and therefore, which can make you unhappy. Q: What is it about flow states that fights feelings of depression? (3) This leads to the third reason, which is that you are constantly reflecting...
and judging yourself against the success or failure of the task you’ve taken on in order to achieve some external value. This leaves you feeling constantly insecure and vulnerable to a world outside of your control. (4) The fourth reason is a consequence of the neglect that chasing material or external goals and values, which leaves less time for the things that bring you true happiness and fulfillment, namely, connection. Q: Why then, when so many people can see that a new car or a fancier handbag are not making them any happier do they continue to engage in this behavior? Q: Are modern forms of advertising and propaganda more powerful than older forms, and are we more vulnerable to their manipulations?

**Disconnection from Childhood Trauma:** Q: How are we defining trauma in this case? Q: Does this apply only to childhood? What about going through cancer, losing your parents, losing a child, etc.? Could this just be thought of as trauma in general?

**Disconnection from Status and Respect:** Q: What did neuroendocrinologist Robert Sapolsky’s work studying baboons in Africa have to do with disconnection from status and respect? Q: What were his findings and why are they important to humans? Q: Is there a larger “status gap” today than there has been in prior decades, and is this a result of the drastic shifts in power and wealth? Q: How does this relate cross culturally and across national boundaries? Q: How important is economic insecurity and do you really believe in UBI?

**Disconnection from Nature:** Your guide on this adventure was a woman named Isabel Behnke, who took you on an excursion on Tunnel Mountain near the Canadian town of Banff. What I found interesting was how she described the symptoms of depression in Bonobos (sitting alone, refusing...
to be groomed, scratching themselves compulsively, losing their hair, etc.). But what she found was that in the wild there are limits to how far this depression will go. Yet, in zoos it seemed the bonobos would slip further and further down, in a way they never would in the wild. And, this isn’t limited to bonobos. We know from over a century of observing animals in captivity that when they are deprived of their natural habitat, they will often develop symptoms that look like extreme forms of despair. Parrots will rip their own feathers out. Horses will start uncontrollably swaying. Elephants will start to grind their tusks—their source of strength and pride in the wild—against the walls of their cells until they are gnarled stumps. Some elephants in captivity are so traumatized they sleep upright for years, moving their bodies neurotically the whole time. None of these species ever behave this way in the wild. Many animals in captivity lose the desire to have sex—that’s why it’s so hard to get animals to mate in zoos. Q: What sorts of studies have been conducted in humans that confirm similar effects when we are deprived of nature? Q: What sorts of theories attempt to explain what is happening that causes this effect? Q: What is E.O. Wilson’s “biophilia?” Q: Is there something about being surrounded by the magnificence of life that takes you out of your egoic obsession with your own concerns, lack of happiness, insecurities, etc.? Q: What about just the simple fact of having other, more immediate and pressing concerns to attend to that keeps you out of your own head? (people often talk about “staying busy” but I think this is a recipe for disaster because you can’t always be busy, and when things quiet down, the depression and anxiety return with ferocity, because they never really left in the first place)

**Disconnection from a Hopeful or Secure Future:** You open this section with an observation: “I had noticed something else about my depression and anxiety over the years. It often made me feel, in some peculiar way, radically shortsighted. When it came, I would only be able to think about the next few hours: how long they would seem, and how painful they would be. It was as if the future had vanished.” You later recount some work done by psychology professor Michael Chandler on an epidemic of suicides in Native American tribes living on Canadian reservations. What he and his colleagues found was that communities with the highest control (control at the tribal level as opposed to at the level of the Canadian government) had the lowest suicide rate; and the communities with the lowest control had the highest suicide. Later, you bring up your friend Angela, who seemed to express similar distress over a life she could not control and a loss of the future tense in your life’s narrative. At one point during your conversation with Angela, she slipped up and said something that stayed with you. Meaning to say “when I was young,” she instead said “when I was alive.” Q: What about this slip up stayed with you? This is the second or third time that I’ve been reminded of a quote from the great scholar and philosopher of...
myth, Joseph Campbell: “I don’t believe people are looking for the meaning of life as much as they are looking for the experience of being alive.” Q: Is there something about being depressed that is synonymous with not feeling alive? Q: So many people who are depressed seem to be focused on learning how to be happy, but might the solution to their despair lie in learning how to live?

**The Real Role of Genes and the Brain:** Q: What do we know really about the role of the brain, genes, and human physiology in depression and anxiety? Q: Surely, there must be people who have physiological dispositions toward depression and anxiety for whom these drugs are helpful? Q: Is your larger point not that there is no physiological or inheritable basis for depression, but that thinking of it as a mental illness is a gross inaccuracy. It is, in fact, a very normal reaction to an abnormal world. Is that right?

**ADDITIONAL QUESTIONS:**

**Kotti Community** — Q: What was so special about the story of the Kotti neighborhood in Berlin that made you decide to dedicate an entire chapter of the book to it? Q: What did the experience of those people teach you? I have heard similar feelings expressed by gay men and women in NYC, who paradoxically miss the days when homosexuality was more strongly persecuted as a time when they felt stronger community. Soldiers express similar feelings around missing war. So do Amish people who choose to return to their communities after their mandatory time away…

**Baltimore Bicycle Works** — Q: What was it about the story of Baltimore Bicycle Works that made you include it in the book? Q: What was it about the way in which this company is run that makes people happy?

**Entheogens/Psychedelic Therapies** — Q: What is the role of the ego? Q: What did you learn about the experiments being conducted at John Hopkins around psilocybin? You talk about this as “overcoming addiction to the self.” Q: What about the role of faith, religion, and God?
**Epidemic of Homelessness** — **Q:** What is your point about homelessness in the west?

**Lessons & Implementation** — **Q:** What did you do to implement the lessons from your own book?

**EXCERPTS FROM THE BOOK:**

All over the world today, people’s pain is being insulted. We need to start throwing that insult back in their faces – and demanding they engage with the real problems that need to be solved. – Johann Hari

If you stay broken up and isolated, you will likely stay depressed and anxious. But if you band together, you can change your environment. – Johann Hari

Many of us are homeless in the West today. It only took a small impetus—a moment of connection—for the people at Kotti to see that, and to find a way to fix it. But it required somebody to be the first to reach out. This is what I would want to tell my teenage self. You have to turn now to all the other wounded people around you, and find a way to connect with them, and build a home with these people, together—a place where you are bonded to one another and find meaning in your lives together. We have been tribeless and disconnected for so long now. It’s time for us all to come home. – Johann Hari

You need your nausea. You need your pain. It is a message, and we must listen to the message. All these depressed and anxious people, all over the world—they are giving us a message. They are telling us something has gone wrong with the way we live. We need to stop trying to muffle or silence or pathologize that pain. Instead, we need to listen to it, and honor it. It is only when we listen to our pain that we can follow it back to its source—and only there, when we can see its true causes, can we begin to overcome it. – Johann Hari

The next day, we went to the Parc Güell, in the center of Barcelona. It’s a park designed by the architect Antoni Gaudí to be profoundly strange—everything is out of perspective, as if you have stepped into a funhouse mirror. At one point you walk through a tunnel in which everything is at a rippling angle, as though it has been hit by a wave. At another point, dragons rise close to buildings made of ripped iron that almost appears to be in motion. Nothing looks like the world should. As I stumbled around it, I thought—this is what my head is like: misshapen, wrong. And soon it’s going to be fixed. – Johann Hari

I had my story. In fact, I realize now, it came in two parts. The first was about what causes depression: it’s a malfunction in the brain, caused by serotonin deficiency or some other glitch in your mental hardware. The second was about what solves depression: drugs, which repair your brain chemistry. – Johann Hari

I started work on this book three years ago because I was puzzled by some mysteries—weird things that I couldn’t explain with the stories I had preached for so long, and that I wanted to find answers to. Here’s the first mystery. One day, years after I started taking these drugs, I
was sitting in my therapist’s office talking about how grateful I was that antidepressants exist and were making me better. “That’s strange,” he said. “Because to me, it seems you are still really quite depressed.” I was perplexed. What could he possibly mean? “Well,” he said, “you are emotionally distressed a lot of the time. And it doesn’t sound very different, to me, from how you describe being before you took the drugs.” I explained to him, patiently, that he didn’t understand: depression is caused by low levels of serotonin, and I was having my serotonin levels boosted. What sort of training do these therapists get, I wondered? – Johann Hari

The first mystery I wanted to understand was: How could I still be depressed when I was taking antidepressants? I was doing everything right, and yet something was still wrong. Why? – Johann Hari

As the years passed, I noticed the pills appearing in more and more people’s lives, prescribed, approved, recommended. Today they are all around us. Some one in five U.S. adults is taking at least one drug for a psychiatric problem; nearly one in four middle-aged women in the United States is taking antidepressants at any given time; around one in ten boys at American high schools is being given a powerful stimulant to make them focus; and addictions to legal and illegal drugs are now so widespread that the life expectancy of white men is declining for the first time in the entire peacetime history of the United States. These effects have radiated out across the Western world: for example, as you read this, one in three French people is taking a legal psychotropic drug such as an antidepressant, while the UK has almost the highest use in all of Europe. You can’t escape it: when scientists test the water supply of Western countries, they always find it is laced with antidepressants, because so many of us are taking them and excreting them that they simply can’t be filtered out of the water we drink every day. We are literally awash in these drugs. What once seemed startling has become normal. Without talking about it much, we’ve accepted that a huge number of the people around us are so distressed that they feel they need to take a powerful chemical every day to keep themselves together. – Johann Hari

Depression and anxiety are only the sharpest edges of a spear that has been thrust into almost everyone in our culture. – Johann Hari

The primary cause of all this rising depression and anxiety is not in our heads. It is, I discovered, largely in the world, and the way we are living in it. – Johann Hari

I think that this is a field that is seriously slick…bought and corrupted, and I can’t describe it any other way – John Ioannidis

How can we say the solution to all the understandable pain and distress I’ve been describing is to take a tranquilizer, and for millions more people to take it forever? – Johann Hari

You aren’t a machine with broken parts. You are an animal whose needs are not being met. You need to have a community. You need to have meaningful values, not the junk values you’ve been pumped full of all your life, telling you happiness
comes through money and buying objects. You need to have meaningful work. You need the natural world. You need to feel you are respected. You need a secure future. You need connections to all these things. You need to release any shame you might feel for having been mistreated. – Johann Hari

You are not suffering from a chemical imbalance in your brain. You are suffering from a social and spiritual imbalance in how we live. Much more than you’ve been told up to now, it’s not serotonin; it’s society. It’s not your brain; it’s your pain. Your biology can make your distress worse, for sure. But it’s not the cause. It’s not the driver. It’s not the place to look for the main explanation, or the main solution. – Johann Hari

I began to use some of the environmental tools I’ve talked about too. I have tried to tie myself more deeply into collectives—with friends, with family, with causes bigger than myself. I changed my own environment so I’m not surrounded by triggers that get me thinking about things that depress me—I’ve radically cut back on social media, I’ve stopped watching any TV with advertising. Instead, I spend much more time face-to-face with the people I love, and pursuing causes I know really matter. I am more deeply connected—to other people, and to meaning—than I have ever been before. – Johann Hari

Once you understand that depression is to a significant degree a collective problem caused by something that’s gone wrong in our culture, it becomes obvious that the solutions have to be—to a significant degree—collective, too. We have to change the culture so that more people are freed up to change their lives. – Johann Hari