

# Professor David Horn on Cultur... Historical Studies of Science

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## SUMMARY KEYWORDS

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## SPEAKERS

David Staley, David Horn, Eva Dale

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- E** Eva Dale 00:00  
From the heart of the Ohio State University on the Oval, this is Voices of Excellence from the College of Arts and Sciences, with your host, David Staley. Voices focuses on the innovative work being done by faculty and staff in the College of Arts and Sciences at The Ohio State University. From departments as wide ranging as art, astronomy, chemistry and biochemistry, physics, emergent materials, mathematics, and languages, among many others, the college always has something great happening. Join us to find out what's new, now.
- D** David Staley 00:32  
I'm very pleased to welcome to Voices David Horn, who's Professor of Comparative Studies at The Ohio State University, College of the Arts and Sciences.
- D** David Horn 00:40  
Nice to be here.
- D** David Staley 00:41  
So, your work focuses on cultural and historical studies of science, and I'd like you to sort of start there - what characterizes this approach to knowledge?
- D** David Horn 00:51  
Well, my undergraduate and graduate training were both in cultural anthropology. so I began

... my intellectual career thinking through the lens of anthropology, but in graduate school, already, my training was very much interdisciplinary. There were a lot of interesting interdisciplinary projects going on at Berkeley when I was there, I did a lot of coursework in history, worked with people in philosophy and political theory. So, from the beginning, I was thinking about my work in a more than narrowly anthropological way, and really became interested in the places where anthropology and history intersect each other. There was a lot of interesting work going on in history, as you probably know, at that time, that was influenced by cultural anthropologists such as Clifford Geertz. And so, that conversation was well underway when I became interested in it, but one of the things that really struck me about the opportunity of working at that intersection was to think about the history of my own discipline, to think about how anthropology came into being; the kinds of problems that it's occupied itself with since the 19th century, what's distinctive about the questions it asks, the approaches it takes to the production of knowledge. And as you probably know, anthropology in the 19th century was a very complex discipline that was, at once about the biological evolution of human beings, and was very much tied up with the history of racism and racial classification, but it's also about language development and about culture and about social organization and kinships. So, I was interested in anthropology as a kind of example of the human sciences that came into being at the end of the 19th century and trying to understand why it emerges at that particular time, what kinds of uses it gets put to at the end of the 19th century, how it's related to questions of government and power. So, from the beginning, I would say I was interested in something like the history of knowledge or the history of thought, but was approaching it from a kind of anthropological point of view, which I think is, in some ways, a little different from the way historians might approach some of the same kinds of questions.

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David Staley 02:46

Tell us about those differences. You were looking at the intersection between anthropology and history; what makes those two disciplines different?

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David Horn 02:52

As I said, I mean, a conventional answer would be that anthropology has been more concerned with culture than history was, at least up until the 1980s, and that was one of the most dramatic examples of the influence of one discipline on another, that a lot of historians started calling themselves cultural historians and started thinking about their work in relation to the work of Geertz and others in cultural anthropology. For me, what has been distinctive about the project of cultural anthropology has been this tension between trying to make sense of practices in faraway places that seem exotic, trying to make the strange familiar, trying to make it intelligible, trying to understand its logic; and at the same time, using that knowledge to make our own practices seem less familiar, to make them seem strange, to loosen the hold that they have on us, to kind of loosen the hold that common sense has on the way we understand the world. So, I've always understood that as part of the power of cultural anthropology, I'm sure it's not unique to the discipline, but that, that sense in which moving across cultural boundaries, in the case of my work, often temporal boundaries, can have a sort of dislocating effect on us, can lead us to think differently about the way we think. And I sometimes talk about it in terms of sort of loosening the hold that categories have, things that we take for granted, categories that seem to us timeless or natural -

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David Staley 04:07

Such as, a category like...?

D

David Horn 04:08

Such as sexuality, such as crime, such as... an example in my more recent work is something like paying attention, things that seem like they characterize humanity generally over time and in every culture, but really, I think our distinctive ways of making sense of human beings and are tied to particular kinds of research projects and often tied to particular kinds of governmental concerns. Sexuality is a good example, Michel Foucault's book on the history of sexuality was, was really an effort to denaturalize that category and - against the assumption that we might have, that we've always sort of worried over sexuality - to argue that sexuality is a, historically, fairly recent kind of object, and thinking in terms of what our sexuality is, is not something that people were really doing before the end of the 19th century. So, in that sense, showing that ways of thinking we take for granted have a history are contingent, are to some extent accidents of history or accidents of culture, means that we could potentially change them, right? We can rethink them, we can...once we recognize that they're not natural or inevitable or universal, then there are opportunities, I think, to think differently.

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David Staley 05:15

So, you said that your interest initially was sort of looking at your own discipline, at anthropology, of cultural anthropology. And I know that some of the books and articles that you've written have been about, not just anthropology, but about the sciences, or specific sciences, or generally. Give us a sense of your work in this area here, in the history of science.

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David Horn 05:33

So, what holds them together is they're all focused on what I and others call the human sciences, which, which includes things that we might typically call social sciences, anthropology, sociology, for example, but also things like psychology, psychiatry, medicine, and even forms of knowledge that we no longer think of as legitimate, like some forms of criminology, or eugenics. They are the range of sciences, most of which developed at the end of the 19th century, that were focused on, in a sense, what it means to be human. So, there's a family resemblance among them, but they're quite different as you move from something like medicine to cultural anthropology. I would describe what holds all of my work together as an interest in the history of problems in the human sciences. So, I'm... I've always been fascinated with why certain kinds of behavior or certain kinds of social phenomena get characterized at particular historical moments as problems, and I'm interested in the specific kinds of problems that they are seen to be, and the specific kinds of knowledge that are then seemed to be kind of urgent to develop around those problems, and the particular kinds of technical solutions that people imagine are necessary to begin experimenting with. So, my first book was on the government of reproduction in the 1920s in Italy and around this idea that there was a sort of demographic problem in Italy. And this was a widely shared kind of anxiety in Europe between the first and second world wars, that people weren't having enough children, the wrong kinds of people were having children. So, it ranges from things like the eugenics movement to pro-

natalist programs in Italy, which really weren't so much eugenic as about just encouraging everybody to get married younger and have more children. I was interested in how people came to worry about populations in that particular way, how it was seen to be tied to the power or potential of a nation, what kinds of interventions it authorized, what kinds of forms of knowledge developed around that problem, investigations - not just a sort of population dynamics, but of behavior of individual couples in their homes - and it had an architectural component, and it had a social hygiene component, and it had an economic component. So -

**D** David Staley 06:14

We're back to interdisciplinarity.

**D** David Horn 07:36

Right, right, exactly. So, those kinds of messy problems interest me. In the second book, it was more focused on criminology at the end of the 19th century,

**D** David Horn 07:46

Yes, and the shifts that happened in criminology in that period. And this time - still focused on Italy - toward thinking about crime as a social danger. There's never been a historical moment where people weren't worried about crime, but I think something distinctive shifts in the 19th century, when people start worrying about crime and criminality and criminals in a new way, they start focusing on social danger. And the fantasy that takes hold at the end of the 19th century is that if you can identify the social danger of particular individuals, you can manage crime in a kind of prophylactic way. So, there's a range of new knowledges that are developed, particularly focused on the body, that seek to distinguish the bodies of criminals from the bodies of normal people, even if somebody hasn't committed a crime, they might be identified as potentially dangerous and worthy of, sort of, at least keeping an eye on or in some sort of formulations, maybe even imprisoning, because they might do something dangerous in the future. It's a really potent, I think, fantasy that we haven't let go of completely, that the body might sort of betray us or tell others what we need to know about certain kinds of potential for good and bad.

**D** David Staley 08:48

The discipline of criminology.

**D** David Staley 08:51

And in an era where we're mapping genomes and editing genes, I suspect this becomes even more problematic.

**D** David Horn 08:58

David Horn 08:58

Right, there's been a lot of interesting work done on PET scans and criminal aggression, and that sort of thing. The idea that if you could look -

David Staley 09:04

That's P - E - T scans on the brain.

David Horn 09:06

Yes, P - E - T scans, that if you could look at a picture, a map of the brain, a colored map of the brain, you could sort of see the potential for criminal danger that that would be a good thing, right? So, it's, they're all -

David Staley 09:15

It's almost like phrenology.

David Horn 09:16

So, again, I mean, one of the things that interests me about the -

David Staley 09:19

Reading the bumps on the head phrenology.

David Horn 09:21

Correct.

David Staley 09:21

Yeah.

David Horn 09:21

The stuff I'm working on at the end of the 19th century is kind of between the phrenology movement and the interest in things like visual scans today. But what holds them together, I think, is the fantasy that the body can produce important truths about, about the nature of individuals.

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David Staley 09:37

So as a historian of science, you say you're interested in the problems that science or scientists were addressing - is that typical among historians of science? I mean, it strikes me, could they also or maybe they also study methods, how do scientists answer those questions? Is that a typical move?

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David Horn 09:52

Sure, right. One way I like to talk about what I do is cultural and historical studies of science. Another way I talk about what I do is, is science and technology studies, which is a broad and interdisciplinary but also multidisciplinary field that engages science and technology. And that includes people who are trained in history of science and philosophy of science: sociologists, anthropologists, increasingly people who have literary backgrounds, working in comparative literature and cultural studies, and that sort of thing. There's an enormous range of kinds of projects that are held under that umbrella. Even history of science contains lots of different kinds of work that might seem to be united by their object, everybody's interested in science, but really, from my point of view, are asking very different kinds of questions. Some historians of science really ask almost philosophical questions about what distinguishes some forms of knowledge, or some forms of logic from others, and there's been a lot of attention in history of science paid to particular disciplines. So, for example, physics and subatomic particles get more attention than other kinds of sciences, at least historically, that's been the case. But, there's room to do lots of interesting kinds of work about sciences in the past. Some of this... there are two sort of important - I was thinking about this the other day - two texts that I read as an undergraduate that really sort of helped me think about the kind of anthropologist that I eventually became: one was Foucault's "History of Sexuality" - I read them both in a history of anthropological theory class, which was an interesting place to read Foucault - and the other was Thomas Kuhn's "Structure of Scientific Revolutions", which, for many people ended up in a lot of critiques of that book, but the abiding interest in that book is the notion that earlier forms of science aren't mistaken, aren't examples of error that we have overcome and moved beyond, but are alternate ways of making sense of the world that give way, sometimes dramatically, to new ways of making sense of the world. And that, to me, that seems similar to this sort of anthropological approach. I have a way of using past understandings of nature, of past understandings of the body or criminality or structure of the mind, which is what I'm interested in more recently, to bang those against our current understandings and see that the way we think now is not just a sort of logical outgrowth of what came before, but in some cases, a decisive break really very different way of making sense of things. And the past is not error on the present truths, but they are both culturally and historically distinctive ways of making sense of producing knowledge and of deploying power. And that's what interests me about the history of problems.

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David Staley 12:28

I'm not accusing you of this - does this run into issues when people sort of anti-science today? Could they make a claim and say, well, it's just simply one historically and culturally determined way of knowing?



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David Horn 12:39

Well, so, I think the word simply is the problem there, because I think, in fact, science is a very...Bruno Latour has made the point, it's hard to produce scientific -

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David Staley 12:47

The French sociologist.

D

David Horn 12:48

The French sociologist. It can be illuminating to think of the work that scientists do as, for example, telling stories about nature, or to think of scientific facts as constructs, or things that are made rather than found in nature. But, that doesn't mean just anybody can make them or any story can count as science; they are produced in a particular way by a whole community of people working together, there's a whole institutional apparatus that surrounds the production of scientific knowledge, there are laboratories, there are journals, there's... so, in a sense, it's.... no, not any story will do and some stories are, we might want to say better than others. But, I still think it's useful not to think of them all as to think of the history of science as a gradual accumulation of more and more facts or to think about it as, as a correction of all the mistakes we made in the past. I still think there's usefulness - I can give you some examples from the history of medicine too - that open up this danger. I mean, I do think we live in a particular moment where there are particularly public forms of skepticism about science. I mean, I don't... I don't think skepticism about science is itself new, but the fact that it has entered political discourse in the way that it has is distinctive and -

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David Staley 13:55

In the 21st century.

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David Horn 13:56

In the 21st century, and worrisome to lots of people. But, we shouldn't shy away just for that reason from talking about the fact that scientific theories are cultural and historical productions. They are... they're made by human beings. That doesn't mean that anybody's facts go or that, you know, we don't really know the way the world is put together - we have to be prepared to say that we know things and that there are certain kinds of truths, but that knowledge and truth are built and made by human beings. And I don't think that's a contradiction, it's just a tension that we have to pay attention to.

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David Staley 14:26

Well, let's talk about your recent work. You're currently working on a collection of essays on automatic writing and the human sciences in the late 19th and early 20th centuries. I'm very interested in this work, but I think you should probably start with a definition of what automatic

writing is.

**D** David Horn 14:41

Sure. In the most general sense, automatic writing is writing that people produce without being consciously aware that they are doing it.

**D** David Staley 14:47

Huh, okay.

**D** David Horn 14:47

So, that can happen under... in a number of different kinds of circumstances. It can happen under hypnosis, it can happen if you're participating in a seance and in a trance.

**D** David Staley 14:56

Okay.

**D** David Horn 14:57

More about that in a minute. It can happen because you have what would have been called a personality disorder at the end of the 19th century, we might say, if you have a kind of organization of your mind that enables one personality to kind of be dissociated from another, so that one part of you is engaged in a task of writing and the other part of you is not aware that it's happening. But, it's also something one can teach oneself to do. So, it's a kind of, you might think of it as a kind of art in a way, you have to teach yourself to be sufficiently distracted so that you can engage in one activity with your eyes and ears, for example, and your mouth can be engaged in a conversation on one topic, while your hand is producing text about a completely different topic, which is a remarkable -

**D** David Staley 15:41

That's interesting.

**D** David Horn 15:42

- thing. Yes. And it's one of a number of remarkable things that people started paying attention to towards the end of the 19th, early 20th century, and started paying attention to in a wide variety of ways. Some people were excited about it, some people were anxious about it, sometimes it was pathologized, sometimes it was celebrated as a particular kind of skill or



capacity. So, there's all kinds of people engaged in automatic writing at the end of the 19th century, and all kinds of people writing about automatic writing, we're worrying about it at the end of the 19th century.

**D** David Staley 16:13

So what are you seeing in the essays, what sorts of things are you exploring here?

**D** David Horn 16:16

This project is a little different from the others that I've undertaken, because the essays really are meant to stand alone, and they are efforts to come at automatic writing from different angles, using different voices, relying on different kinds of sources, which for me, I think is kind of true to the phenomenon in a way. I'm trying to get at the sort of messiness and boundary blurring that was generated around this phenomenon. So, they take up different kinds of questions. Some of them are concerned with the role that automatic writing played in Spiritism and the possibility that you could communicate with the dead, that the author of the things that were being produced by the hand of a medium, for example, was not the medium herself, but somebody else.

**D** David Staley 16:58

The dead uncle, or...?

**D** David Horn 16:59

Yes, somebody writes, the dead uncle. There were also people who are interested in relation to other kinds of psychic phenomenon, and sometimes those people didn't want to have anything to do with people who are interested in Spiritism, that it could be an example of telepathy, right? If somebody else's mind was controlling the pencil, but it wasn't the mind of somebody dead, it was the mind of somebody across the room or across the ocean or that sort of thing. Spiritists are interested in it for one set of reasons; psychiatrists, psychologists are interested in automatic writing because they think it has the potential to reveal interesting things about the structure of the brain, the way the brain works, about the nature of personality, about the nature of the self, is the self a unitary thing, or is it multiple things? What does it mean when the self can be doubled or divided, what does that teach us about who we are? Is that always a pathological state or can that be a healthy state? And again, can even maybe be a... you know, some people talk about it almost as a superpower, right, as that kind of superhuman capacity.

**D** David Staley 17:55

The way DaVinci could write backwards, for instance.

**D** David Horn 17:57

David Horn 17:57

Right, the mirror writing. You could say that 19th century human sciences were fascinated with writing in a general way, there are a lot of people interested in what... what does mirror writing tell us about the way the brain's organized and the way the brain is connected to the limbs and the way in which cognition and writing are connected to one another? This is also a period when graphology it is really sort of consolidating itself as a human science, the idea that you can tell something about people's personalities from their handwriting. So there are a lot of different kinds of people interested in writing, and particularly handwriting in this period. But automatic writing is kind of a special case, because it's happening without anybody sort of, they may intended in the sense that they may create the conditions that are required for its production. But while it's happening, they're not aware that it's happening. And the third group that we just mentioned, the third group of people who were interested in it were artists, writers, poets, painters, and particularly in the surrealist movement, because they thought automatically producing text might be a way of sort of getting consciousness out of the way, right of removing obstacles to us some kind of more true or creative or, you know, expression of something that if you could just sort of let things come out, it might be interesting to see what kind of effects that produced and they would, some of them experimented with drugs and alcohol to produce automatic writing. But they were also really interested in the work that psychiatrists were doing. And there was a lot of sort of cross conversation and cross traffic among these communities, who are all interested in automatic writing again, the thing that interests me about it is the blurred boundaries, the messiness of these kinds of communities, which you might imagine we're scientists and spiritist wouldn't have much to say to each other, but in fact, they often do.

David Staley 19:35

And that was sort of my next question. So, it sounded like there were - and maybe this is a mischaracterization - but it sounds like there were serious people, or people that we would identify as serious - you mentioned psychologists and these sorts of things.

David Horn 19:46

Nobel Prize winners, yeah.

David Staley 19:48

So do you distinguish or do you attempt to distinguish those who are looking at automatic writing as serious scientists versus, I don't know, someone who is doing a seance or something like that? Is that an unfair are sort of division.

David Horn 20:01

It's a boundary that was being actively policed at the time. But it's not about -

David Staley 20:05

By whom, who was policing?

D David Horn 20:06

Mostly by scientists, some scientists wanted to distinguish as sharply as possible what might count as a sort of legitimate scientific interest in automatic writing and a illegitimate, superstitious, quasi-religious, pseudo-scientific interest in automatic writing. Troubling that narrative are a bunch of Nobel Prize winning scientists who were also participating in seances, who also believed that they were receiving communication from their dead children. So, the lines don't get drawn neatly in the way that we might imagine; there are serious scientists on both sides of that argument, and using the rhetoric of science to defend their claims. So, for example, you have someone like Charles Richet, who was a Nobel Prize winning physiologist, Oliver Lodge who worked in physics, arguing that scientific curiosity that the kind of open-mindedness that has been part of the scientific method for millennia requires that communication with the dead be taken seriously, that we examine the evidence, that we conduct tests. One of the interesting things you find that links the living room where a seance is happening with the laboratory where another kind of study of automatic writing is happening is that they've used many of the same sort of experimental protocols; they have controls, they have... they invite scientists in to observe, they take notes, they take meticulous seances are one of the things that's interesting. seances are meticulously documented in the archives. Everybody who was there everything that happened, everything that was said there often complete transcripts of everything in a seance copies of all the automatic writing that were produced, there imagined as sort of case studies right from the beginning. So even when they're not scientists doing them, they are producing a kind of scientific archive of these extraordinary events.

D David Staley 21:52

So what happened, then? I mean, I doubt unless you tell me otherwise, I doubt that scientists have the same sort of interest in automatic writing today. Why is that? What happened to this interest in automatic writing?

D David Horn 22:04

Well, so it's interesting to think about the particular appeal and power that automatic writing had at that particular historical moment, why were so many people engaged in trying to do it and trying to learn about it. And this is partly about the history of Spiritism. Again, this is only a part of the range of things that I'm interested in. But there's been a lot of interesting work done on the rise of Spiritism. And why it happens at this particular moment in the, starting in the 1840s. That's when the "rapping" in Rochester with the Fox sisters - I don't know if people will know that story, but there was a famous sort of founding moment, although presumably, people thought that they had communicated with the dead well before 1843 - there's a family in Rochester, experiences rapping sounds and...

D David Staley 22:49

Rapping, like knocking?

D David Horn 22:50

Like knocking sounds in the house, and it's not possible to tell where they're coming from, and they seem to be linked to the presence of the girls in the house and they seem to follow the girls to other houses as well. And so, there's this whole... then there's these efforts to sort of figure out if the rapping is meaningful, and they eventually develop a system, you know, one rap for yes, two raps for now, and that sort of thing. And then they started asking questions of the mysterious rapper and discover that it's the spirit of a dead person who was murdered in the house, and there's this whole story that elaborates around that. And this quickly gives rise to similar kinds of experiences in other parts of the United States and it goes across the Atlantic Ocean, and people are engaged in seances where they hear rapping or there are tables that are turning or knocking or people become interested in Ouiji boards. And, you know, here's this whole sort of interest in the possibility of communication with the dead that's being mediated in a very particular way. And many people have been struck, including the spiritists by the analogies with telegraphy, that this is a kind of coded-

D David Staley 23:48

Like Morse code?

D David Horn 23:49

Right, although really, it's interesting that the spirits apparently didn't know Morse code, because they almost never used it. I mean, it would have saved a lot of time. There's this wonderful moment, and Victor Hugo was one of the people who was interested in communicating with spirits, when he -

D David Staley 24:02

The novelist, Victor Hugo?

D David Horn 24:03

Yes. When he was in exile from France, he was out on the Channel Islands and he had a lot of visitors who would come out, and they would ask questions of various kinds - and they would talk to celebrity spirits, so would be like, you know, Shakespeare and, you know, Greek philosophers and Ben Franklin was a very popular spirit communicator - they would recite the alphabet, and when they got to the right letter, there would be a knock. It's a very time consuming way of communicating, and as one commentator said, it took a very long time because you forget how many Z's there are in the French language.

D David Staley 24:36

David Storey 2:13

Once this essay collection is finished, I'm interested in what's next. What's after this project for you?

D

David Horn 24:42

Well, one of the things that interested me and one of the essays I wrote for this collection is the history of what we, today, consider forms of illness or psychiatric disorders, such as attention deficit syndrome, and in various forms of autism, there's another chapter that's interested in autism and assisted communication, which is facilitated communication, which is a very controversial topic in the community of advocates around autism. But, ADHD and ADD are ubiquitous kinds of diagnostic categories today, and I'm interested in this one essay, and I would say, in my future work more generally interested in how we come to understand ourselves as ill in particular ways, at particular historical moments. Psychiatrists would probably want to argue many have written articles to this effect, that people have always had ADHD, we just didn't know it. And the names have changed for the disease, and we're now we feel like we have a better name for it, and a better set of diagnostic criteria than we might have had a hundred years ago. I'm struck by the fact that people who are writing about attention in the 19th century are worried about it in a very different way than we worry about it today. It's not about the behavior of boys, in particular, in classrooms, it's about the behavior of adult women, particularly women who are considered hysterics at the 19th century. So, it's the people who aren't paying adequate attention are different in kind from the people who today aren't paying adequate attention. And that opens up a whole set of questions about adequate - to what ends and in what kind of context? What does it mean to pay enough attention, and why do we worry about paying attention in the ways that we do? And I think there's something culturally historically distinctive about the ways we worry about it, it's linked to the way we organize our classrooms and the way we teach and the kind of economy we live in and the kinds of demands that different kinds of media placed on us and the kinds of demands that particular kinds of jobs placed on us, that paying attention has a particular stakes today that might be different from the stakes that had in the 19th, or the 18th, to the 17th century, or the stakes that it has in other parts of the world. So, in a general way, I'm interested in, particularly in relation to mental illnesses and how we come to worry about differential capacities of human beings in historically and culturally distinctive ways. The tension here, I mean, this goes back to a question you asked earlier about, you know, science, skepticism, and that sort of thing. And this is the tension I live with and embrace; in fact, in the classroom, it's one thing to say that ADHD, for example, is a historical construction or a cultural construction or a fairly recent invention, which is the language some people use to talk about it. That seems to suggest, on first hearing it, that it's not real, right? That it's just made up, or that it's just language or something, and it seems to deny the suffering of people who suffer, right? Again, the challenge in my writing and in thinking about this, but also in the classroom is to say, mental illnesses are real, can be thought of as real and they produce real suffering, and people get better or not depending on what kinds of treatments they undergo. And for many people, certain kinds of pharmaceuticals make their lives dramatically better than they otherwise would be. You can hold on to all of that sort of material reality and still, I think, recognize that ADHD or bipolar disorder or certain forms of depression are culturally historically distinctive kinds of ways of making sense of what's going on in people's heads, and the relation between individual behaviors and the larger society in which they live. Keeping those two balls in the air is part of what I enjoy about teaching.

**D** David Staley 28:14  
David Horn, thank you.

**D** David Horn 28:16  
A pleasure to be here, thank you.

**E** Eva Dale 28:18  
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