# THE CHRONICLE OF HIGHER EDUCATION

# Bait and Switch

How the physicist Alan Sokal hoodwinked a group of humanists and why, 20 years later, it still matters.

An oral history by Jennifer Ruark | January 01, 2017 <- PREMIUM



Illustration by Julia Schmalz

t first, no one noticed. When the left-wing cultural-studies journal *Social Text* released a special issue on "The Science Wars" in April 1996, the last article stood out only because of its source: "Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity" was written by the sole scientist in the bunch, a New York University physicist named

Alan Sokal.

Liberally citing work by feminist epistemologists, philosophers of science, and critical theorists — including two of *Social Text*'s editors, the NYU American-studies scholar Andrew Ross and Stanley Aronowitz, a sociologist at CUNY Graduate Center — Sokal endorsed the notion that scientists had no special claim to scientific knowledge. Just as postmodern theory revealed that so-called facts about the physical world were mere social or political constructs, he wrote, quantum gravity undermined the concept of existence itself, making way for a "liberatory science" and "emancipatory mathematics."

A couple of weeks later, in the magazine *Lingua Franca*, Sokal revealed that he didn't believe a word of what he'd written. It was all a big joke, but one motivated by a serious intention: to expose the sloppiness, absurd relativism, and intellectual arrogance of "certain precincts of the academic humanities." His beef was political, too: He feared that by tossing aside their centuries-old promotion of scientific rationality, progressives were eroding their ability to speak truth to power.

Newspapers around the world lapped up the hoax. Conservatives exulted. "Deconstructionists read things like *Social Text,* which will never again be called a 'learned journal,'" gloated George F. Will in *The Washington Post.* The success of the prank appeared to confirm all their suspicions about tenured radicals.

Though it met with stinging rebuttals, Sokal's critique also prompted a period of soul-searching among scholars, who held campus symposia and churned out their own essays considering the issues it raised. Today, a search for the term "Sokal hoax" on JSTOR turns up scores of references in articles from fields as different as law, literary studies, education, mathematics, and economics. Sokal made something of a second career of his critique, writing two subsequent books on the topic.

Twenty years later, the incident still resonates. Writing in *New York* magazine in November about the presidential campaign, Jonathan Chait said he first saw Donald Trump "as a living, breathing Sokal hoax on the Republican Party." And as academics grapple with the implications of Trump's victory, the issues at stake in the hoax take on a renewed urgency. Disagreements over how scholars arrive at truth, how academic expertise is viewed by the public, and the potential excesses of skepticism have only grown more prominent.

In what follows, people close to the events or affected by them reflect on their thinking at the time and what hindsight offers. Their accounts have been edited for clarity.



Peter Searle for The Chronicle Review

ALAN SOKAL: In the spring of 1994, I saw a reference to the book by Paul Gross and Norman Levitt, *Higher Superstition: The Academic Left and Its Quarrels With Science*. My first thought was, Oh, no, not another one of those right-wing diatribes that tell how the Marxist deconstructionist professors are taking over the universities "and brainwashing our children. There had

been a whole spate of such books in the

Alan Sokal

early 1990s - Dinesh D'Souza and others.

My second thought was "academic left and its quarrels with science"? I mean, that's a little weird. I'm an academic leftist. So I decided to read it. I learned about a corner

of the academy where people were employing either deconstructionist literary theory or extreme social constructivist sociology of science to make comments about both the content of science and the philosophy of science, often in gross ignorance of the science. The first thing I wanted to do was go to the library and check out the original works that Gross and Levitt were criticizing to see whether they were being fair. I found that in about 80 percent of the cases, in my judgment, they were.

**EMILY MARTIN, professor of anthropology, New York University:** People kept telling me, "Oh, you know you're in that book, and they're on the attack." The tone of the writing was very dismissive and disrespectful, and it kind of stung because science studies was such a new field. It had just been getting going in the late '80s and '90s. It was very exciting, and a lot of incredibly interesting work was being done.

**SOKAL:** I thought, well, I could write an article to add to the Gross and Levitt critique, and it would probably disappear into a black hole. So I had the idea of writing an article that would be both a parody and an admittedly uncontrolled experiment: I would submit the article to a trendy journal and see whether it would be accepted. Writing the parody took maybe two or three months.

Before I submitted it I did show it to a few friends — I tested them blind to see how long it would take them to figure out that it was a parody. The scientists would figure out quickly that either it was a parody or I had gone off my rocker. But I mostly tried it on nonscientist friends, in part to see whether there were any obvious giveaways. I wanted it to not be so obvious.

I was looking for a journal that published articles that were kind of in a similar ideological vein. There are several, and they're not all the same. But *Social Text* was kind of in that intellectual sphere.

thanks for submitting your interesting article to social text. the editorial committee is reviewing it, and we hope to get word to you soon. — email to Sokal from Andrew Ross, Feb. 8, 1995

I hope I didn't make too much of a fool of myself in the section on cultural and political implications. As I said in the cover letter, I'm a total amateur in those

areas. Anyway, I look forward to the reviewers' comments and suggestions. — email to Ross from Sokal, Feb. 8, 1995

That spring, *Social Text* accepted Sokal's submission, and on May 15, Sokal sent a final version of the article, with only minor revisions. It would take nearly a year for the article to appear.

**SOKAL:** I had no idea when this special issue would be published, and the hoax had to be kept secret. During all this time, I studiously found excuses to avoid meeting Andrew Ross, even though his office was one block away from mine at NYU. It's one thing to write a parody and to dissemble in an email. It's another to be a good actor, which I'm not.

The small number of people that I had shown it to before it was accepted would come to me and say, "Can I show it to my friend so-and-so, who is a philosopher or who is a historian or who is a sociologist and who would appreciate it," and my answer was always, "Yes, but you have to swear them to secrecy." There was an ever-widening circle of people — that was how I met Barbara Epstein.



Noah Berger for The Chronicle Review

BARBARA EPSTEIN, professor emerita, history of consciousness department at the University of California at Santa Cruz: A friend of mine at UC-Davis said that she wanted to tell me about something if I would promise absolute secrecy. She said there is a physicist at NYU who has written an article that purports to be by a scientist who has converted to poststructuralism, and actually, it's a

Barbara Epstein

#### hoax.

She said he wants to find a humanist who knows something about poststructuralism, can't stand it, is a leftist and feminist, to work with. He wanted to write a piece outing himself, and explaining why he had done it. I said, "Absolutely. Sign me up."

### DAVID GLENN (freelance journalist who later worked for The Chronicle):

Sometime in February '96, I was at a dinner party in Brooklyn, where there was a lot of wine flowing. There was a grad student there in sociology at CUNY, Stanley Aronowitz's program. Toward the end of the evening, he mentioned that he had heard a rumor that someone had prepared a hoax article for the Science Wars issue of *Social Text*. I took this to my friend Rick Perlstein, who was then an editor at *Lingua Franca*, and he thought it seemed worth pursuing. I went back to the CUNY grad student. He wouldn't give me any more details.

Someone at *Lingua Franca* knew that Routledge published the tables of contents of forthcoming issues of *Social Text* in this little quarterly broadsheet called "Cultural Studies Times." So I walked a few blocks south from 38th Street down to where Routledge was, and said, "Hey do you have a copy of 'Cultural Studies Times'?" They gave it to me, and sure enough, there was a list of forthcoming authors and titles for this special Science Wars issue.

Someone called Duke University Press, and there was some anxiety about this because it was a little unusual to ask for advance galleys of a journal. But Duke came through with it.

We were a little bit hilariously slow to light on Sokal's essay as the obvious candidate. I called Sokal once we were confident that the issue of *Social Text* was at the printer and couldn't be called back. I was nervous. I didn't know how he would respond.

**EPSTEIN:** Alan called me up and said, "Who do you think this person is? Do you think he's a spy for Stanley Aronowitz?"

**SOKAL:** I was worried that the game was up, that it might not even appear because the whole thing might be undone.

**GLENN:** He said he wanted to talk in person, not over the phone, which sounded a little bit cloak and dagger. We worked out a meeting on a bench at the New York Public Library, at 42nd and Fifth.

**SOKAL:** I had resolved that when I met him, I would play dumb for five or 10 minutes, and then if he asked me whether my article was a parody, I would say, "Yes, it is. Congratulations. You've been very clever."

#### Sokal and Glenn met on March 29.

**GLENN:** He told me, pretty nervously, that he had hoped that the hoax would not be revealed for a year. His hope was to see that his essay would be cited or discussed at conferences.

**SOKAL:** Would people praise it? Would people criticize it? Would people totally ignore it? Would somebody figure out that it was a parody?

**GLENN:** I didn't tell him much about how I had gotten wind of it, but I said enough to persuade him that it was really unlikely to stay secret for long.

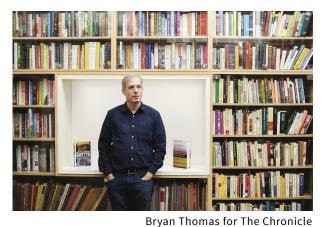
SOKAL: The jig was up.

**GLENN:** He pulled out of his briefcase a short manuscript and said that he wanted *Lingua Franca* to publish his own account, and to do it soon. We were just a few blocks north of their offices. I had told Alex Star [the magazine's editor], "I am going to meet with this guy at 10:30 in the morning and I'll give you a call later and let you know how it went." But then, you know, I actually walked in there with Sokal trailing behind me on the staircase.

**ALEX STAR:** I was kind of shocked by the whole thing.

**GLENN:** Sokal handed over his draft essay, and Alex sat there and silently read through it. He decided that we'd take the weekend to think things over.

**STAR:** It was all very, very surprising, but it felt like, provided it was something that we could edit as we would normally edit anything, we would go ahead with it.



Bryan Thomas f

**GLENN:** Star was understandably nervous about actually intervening in this affair by publishing Sokal's article without getting a response from *Social Text* in advance.

Alex Star

**STAR:** When you're an editor, you do treasure some degree of trust with your writers, and what Sokal did, arguably, raised issues about that. Those are all things that I had complicated feelings about, and yet, ultimately, I felt he gave a very clear, if debatable, justification for what he did. And, you know, we're putting that out there, and the importance of raising these issues, even by unusual methods, seemed significant to me.

The timeline was tight. Star received a copy of the *Social Text* issue just in time to include an image of its cover in Sokal's essay. *Lingua Franca* went to press April 16, and soon afterward started alerting the news media.

Anyone who believes that the laws of physics are mere social conventions is invited to try transgressing those conventions from the window of my apartment. (I live on the twenty-first floor.)

- Alan Sokal, in the Lingua Franca revelation of his hoax

**SOKAL:** I was at a conference at the University of Minnesota. NPR managed to reach me and did a five-minute interview, and then all hell broke loose. The next day, *The New York Times* was calling, and several television networks. I refused all of the television offers because I didn't think that the television would do a serious job. I mean, I didn't want to just contribute one more "let's have a laugh at the professors" kind of thing. I wanted to have a serious discussion.

**EPSTEIN:** A colleague of mine calls and tells me that this dreadful rumor is running around Santa Cruz that I was the author of this horrible article in *Social Text*, and he won't believe such a terrible thing unless I tell him it's true.

By that time, I really was persona non grata. It was very clear that I was a minority in my department, and not only a minority but a target. I had an article in *Socialist Review* in which I criticized poststructuralism. It had become a crusade and an orthodoxy and a juggernaut, and the more I was part of that culture, the more I disliked it. The emotional atmosphere around this wasn't that different than the emotional atmosphere around the election right now. People on two sides of the

fence were barely talking to each other.

**MARTIN:** It was a brilliant practical joke. It showed up the inadequate editorial sense of some of the publications and the takeover by almost incomprehensible jargon. But a lot of us felt there was a big misunderstanding of what the goal of science studies was.



Bryan Thomas for The Chronicle

Bruce Robbins

BRUCE ROBBINS, Columbia University humanities professor, co-editor of Social Text, 1991-98: I remember listening to NPR and suddenly Social Text is being talked about, which was very exciting. The first thought was, you know, we are a very small left-wing cultural journal and suddenly we've made it to the big time. But it did sink in relatively quickly. There was an "Oh, shit"

#### moment.

I read Sokal's hoax after the scandal hit. I had not read it before.

The ordinary *Social Text* procedures were that four people had to read a piece. I don't remember who — I know that Andrew Ross was one, and Aronowitz was one, and I think George Yudice was one, and maybe Randy Martin, who died a year or two ago.

# GEORGE YUDICE, Miami University professor of modern languages and

**literatures:** I remember not liking it and agreeing not to reject it but to archive it after a first round of discussions. Once Andrew Ross brought the article back into a second discussion for a special double issue of *Social Text* on the Science Wars, I went along with other members of the editorial board. *[Ross declined to be interviewed for this oral history. Aronowitz did not return messages from* The Chronicle Review.]

**ROBBINS:** They decided to take it because here was a scientist — even expressing himself very awkwardly and without much knowledge of what it was that he thought he was enthusiastic about — weighing in and kind of on "our side." The fact that he quoted Stanley Aronowitz 13 times was probably not a matter of complete indifference to Stanley Aronowitz, and Stanley Aronowitz was the one surviving founder of the journal, who was 10 or 15 years older than anybody else. So if he wanted it — *Social Text* is not a refereed journal — if one of the founders was there and wanted it, it was probably going to go in.

All of us were distressed at the deceptive means by which Sokal chose to make his point. This breach of ethics is a serious matter ... the openness of intellectual inquiry that Social Text has played its role in fostering will be curtailed. —from Social Text's editorial response, signed by Bruce Robbins and Andrew Ross

**SOKAL:** There is an ethical issue to be considered. Basically, our reasoning was that the subculture that I was criticizing had become ingrained and self-referential and mostly disdained critiques from outsiders, so that an ordinary type of intellectual critique was precluded.

**MICHAEL BÉRUBÉ, professor of literature, Penn State University:** There's sort of a hothouse quality to a place that will accept an essay like this without sending it around to someone outside the bubble who will look at it more skeptically.

**EPSTEIN:** I had absolutely no moral qualms about the hoax because it seemed to me that an opening had to be created, and this was the only way to create it.

**ROBBINS:** I actually did not have an ethical problem with Sokal. If I had the chance to pull a hoax on Dick Cheney, whom I consider an enemy, I would do it. Andrew wrote the editorial response, and out of solidarity I signed it. It was really his letter. I thought that Sokal's mistake was that he thought of us as enemies. I mean, there were epistemological differences, but so what?

**NORTON WISE, professor in the history of science, UCLA:** I read Sokal's *Social Text* article and thought it was pretty funny. It was just nonsense. Of course, Gross, Levitt, and the others were claiming that science-studies people were engaged in what they called radical relativism. You may be able to find such an extreme, but it's not by any means the basic argument of the social-constructionist perspective.

**ELLEN SCHRECKER, professor emerita of history, Yeshiva University:** What Sokal was showing was the downgrading of academic expertise. Historians go into the

archives and we interview people and try to find out what happened from the evidence — rather than relying on secondhand information. Basically it's a confrontation between a trained mind and a piece of evidence. This is what physicists do, this is what biologists do. This is what literary theorists do, too, but I think what happened to them is they ran out of new documents, and so they began to poach on the rest of us.

**HELEN LONGINO, professor of philosophy, Stanford University:** Certainly there are some deconstructionists who have tried to take on science. But that was, by far, the minority of the work that was being done in science studies. If Sokal had submitted it to a serious science-studies journal, people would have seen through it. Sokal has this very sort of old-fashioned idea about science — that the sciences are not only *aiming* at discovering truths about the natural world but that their methods succeed in doing so.

**STANLEY FISH, professor of humanities and law, Florida International University:** Thomas Hobbes said it hundreds of years ago: "Where there is no speech, there is no truth or falsehood." Knowledge is made, of course, by men and women in the context of assumptions, presuppositions, available vocabularies, and available methodologies.

**WISE:** You don't need to believe in a particular theory of gravity in order to think that there is gravity. Whether you're Aristotle or Newton, you're not going to be jumping out windows, because there's a validity to the view that falling bodies fall, and it doesn't matter which view of the nature of gravity you hold in order to believe that.

What interests people in science studies is how one view versus another comes to be taken as "true" — here in scare quotes — and arguing that oftentimes that's a matter of cultural conditions, which is not a very radical position.

**SOKAL:** These [social constructionist] texts are often ambiguous. In some

The hoax was not just about science studies. It was about an academic culture.

instances it's the radical interpretation that is intended. Now, maybe once criticized, they want to backpedal and say, "I am not now and never have been a relativist."

STEVEN WEINBERG, Nobel Prize-winning physicist, University of Texas at Austin:

We in science are not so naïve that we think that science is done in a vacuum or it's done in outer space without being affected by the surrounding culture. We just think the final results that we're aiming toward are culture-free.

People do decide what kind of evidence is relevant, but we've learned how to learn about the world, what kind of thing provides a standard of evidence. We may have not fully come to the end of that process, but the process is not something that is dictated by our culture. It is something that is dictated by our interaction with nature.

# STEPHEN HILGARTNER, professor of science and technology studies, Cornell

University: Sokal simply lumps people together, and these people often share neither intellectual outlook nor research questions, nor disciplinary background, nor the kinds of places they publish. I'm not saying there are not interconnections among these fields, but lumping them together and just calling them postmodernists, relativists, and their fellow travelers is really loose. It gets close to being a kind of academic McCarthyism, and it really is not something that is intellectually or ethically justifiable. The people who found it the most inspiring were people like Rush Limbaugh and George Will, who already had lots of complaints about the American university and were quite happy to weave the Sokal charges into their accounts.

**FISH:** The hoax gave people who had never read any postmodernist discourse, and didn't have the slightest idea of what postmodernists like Derrida or Lyotard or Foucault and others were trying to do, an easy way to dismiss that project. All they thought they had to do was to invoke the Sokal hoax. That would be, in their mind, a totally sufficient put-down.

WISE: There's a quite interesting question of who were the culture warriors from the science side. It was a very small group of people who took it upon themselves to correct what they regarded as the radical relativism that was brewing in universities. They were a very definite sector, especially elementary particle physicists, and a few mathematicians. Elementary particle physicists typically are looking for universal laws, universal principles from which you can deduce what the world is like in detail.

You also had older physicists who had emigrated from Europe, who remembered the Nazis marching down the street taking over the university buildings and so on, and for them, there was this very strong association between relativism and Nazism, so moral relativism, but shading over into intellectual relativism. The sense really had grown up rather strongly in the U.S. in the postwar period that it was one of the reasons why Europeans had been so incapacitated to respond to the Nazis.

**EPSTEIN:** The hoax was not all particularly about science studies. It was about an academic culture. People in the humanities, especially people who were particularly ambitious, were aware that the fortunes of the sciences were rising in academia, and the fortunes of the humanities were declining. So to have a scientist sign on to poststructuralism was such a coup that they didn't bother to read his article carefully.

Part of what poststructuralism was about was an effort of young academics to stake out a particular approach, and that approach pit culture against politics and economics. What they were saying was, unlike those old fuddy-duddy economic determinists, we understand that the main category is culture. But then we had the recession of 1998, and then in 2008 there was the economic meltdown. It became really difficult to argue that economics wasn't important.

**SOKAL:** I do get the feeling that there is less ardor for those ideas than there used to be, and I think I can take a small amount of credit. But the main credit has to be taken by George W. Bush and his friends, who showed where science bashing can lead in the real world. People on the academic left who were previously maybe not hard-core relativists but were somewhat sympathetic to that current of thought have had second thoughts.

**LONGINO:** Both sides have moved closer to each other. Not everybody, but I think you find a number of scholars in cultural studies and social studies being more circumspect in their articulation of conclusions that their work supports.

**SOKAL:** Andrew Ross is no longer writing about science or philosophy of science. He and I made common cause when the graduate students at NYU were trying to unionize, and we were both on the same side of that. And Bruce Robbins and I became friends back in 2001 or 2002, when we



collaborated on writing the "Open Letter from American Jews" to our government on peace in the Middle East. Yunghi Kim for The Chronicle Review

Andrew Ross

**ROBBINS:** I had no trouble doing that at all. We have friendly relations.

**STAR:** A lot of the erstwhile antagonists have realized that they actually have a lot in common with each other. Those battles seem less contentious when you realize that you share a commitment to the university as a place of relatively unfettered intellectual inquiry and autonomy, and to support that against budget cuts and political interference and so forth is really important.

**BÉRUBÉ:** Now that we're officially "post-fact," I think the hoax has a certain urgency. I was already starting to go back five years ago to give him his due on what thoroughgoing epistemological skepticism could do when it's mobilized by the right for climate change, or for that matter for any scientific question.

**WEINBERG:** I never heard anything remotely postmodern from a member of Congress. I think the forces against taking climate change seriously are overwhelmingly economic. It's like the question of whether tobacco smoke is bad for you or whether sugary sodas are bad for you. All these things are opposed by people who have a financial stake. It has nothing to do with the Science Wars.

**SCHRECKER:** What really bothered me was the inability of Alan Sokal and the other people who were responding to him to realize how this was playing out in the larger world. The hoax was very clever. But then he should have made the broader point about what's really happening out there. I don't think that things would have changed if he hadn't written it, but he didn't look around him and see that academic expertise was already under attack. Today is the culmination of 40 years of attacks on academic expertise. It's fine if you want to make fun of deconstruction, but it's not fine if you make fun of climate change.

**BÉRUBÉ:** It's widely accepted now that among the most controversial things you can do on a campus is deal with gender and sexuality, the Middle East, or climate change. I mean, they're not exempt, the scientists. I didn't think they would be, but it took some years for my argument to take hold. I said, the forces that are this anti-intellectual and this skeptical of what we do on campus, they'll get wind of you

soon enough.

**SOKAL:** There is in American culture a persistent anti-intellectual current, which looks down on the pointy-headed professors and is happy to pick up on any excuse to have a laugh at them. That was the negative side.

**BÉRUBÉ:** The echo chamber that publishes Sokal's essay is so much less pernicious than the echo chamber that believes Hillary Clinton was running a child-sex ring out of a pizza parlor. Now we're talking something well beyond epistemic closure and something much more like total batshit.

**SCHRECKER:** What we're reaping is an incredible moment of anti-intellectualism in American life, and it's dangerous.

Jennifer Ruark is a deputy managing editor at The Chronicle Review.

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