Shrink Rap Radio #19, December 27, 2005, Social Psychologist Dr. Philip Tetlock on the Predictive Errors of Political Experts

Dr. David Van Nuys, Ph.D., aka "Dr. Dave" interviews Dr. Philip Tetlock (transcribed from www.ShrinkRapRadio.com by Kristi Sanchez)

Excerpt: Hello psychonauts! This is David Van Nuys, aka "Dr. Dave" coming to you once again from the beautiful wine country in Sonoma County, California. I'm sure you know by now, our show revolves around interesting personalities in and around the world of psychology. Shrink Rap Radio is the podcast that speaks from the psychologist in me to the psychologist in you - whether you be amateur, student, or professional. It's all the psychology you need to know and just enough to make you a little bit dangerous.

Introduction: Would you be shocked to know that the people who make prediction their business - people who appear as experts on television, get quoted in newspaper articles, advise governments and business, and participate in punditry roundtables - would you be surprised to learn that their predictions are no better than those made by the rest of us? My guess is that you probably wouldn't be that surprised. At the same time though, it's a fairly shocking finding. Especially when you've stopped to consider how many important decisions by government leaders and business leaders turn upon the opinions of so-called experts. What got me to thinking about this was a wonderful 3-page book review that appeared in a recent issue of the New Yorker Magazine. In fact, it was the December 5th, 2005 issue. The subject of that review is a new book by Dr. Philip Tetlock, and the title of the book is *Expert Political Judgment*: How good is it? How can we know? According to the New Yorker reviewer, Dr. Tetlock claims that the better known and more frequently quoted the experts are, the less reliable their guesses about the future are likely to be. In other words, the famous people we see on TV - the ones who are paid huge salaries to advise government leaders, the people who spend their lives studying the state of the world - these people do worse in their predictions than dart throwing monkeys.

When I discovered that Dr. Tetlock is a social psychologist in the School of Business at the University of California at Berkeley, I got really excited about the possibility of, "hey, maybe I can snag this guy for an interview. That would be really cool!" And part of the reason why it is so cool is not just because of the really interesting work that he has done, but also because this will mark the first interview that I have done with somebody who is outside my own personal circle of friends and acquaintances. It turned out that Dr. Tetlock was on sabbatical in New York City. But, I managed to track him down and here's the interview.

Dr. Dave: Hi Phil. Welcome to Shrink Rap Radio. I really appreciate the opportunity to interview you about your book. I can't tell you how much I've been looking forward to this interview.

Dr. Philip Tetlock: It's my pleasure.

Dr. Dave: Yeah, great. I read this fascinating review of your book. Your book is called *Expert Political Judgment* - or no, I guess that was the name - or yeah, that is the name of your book, and I read the review in the December 5 issue of the New Yorker, and I immediately wanted to share your work with my listening audience because to me, the New Yorker is somewhere near the pinnacle of American letters. Were you thrilled to have your book be the subject of a 3-page review there?

Tetlock: I was happy. Yeah.

Dr. Dave: (laughs)

Tetlock: Good news. Most of my work is reviewed in lower circulation outlets.

Dr. Dave: (laughs) Yeah, right. Maybe more like academic outlets, huh?

Tetlock: This is true.

Dr. Dave: Yeah. Now, as I recall, the book is based upon about 25 years of your research. Is that right?

Tetlock: Well, it's closer to 20, but who's counting.

Dr. Dave: Okay, and um, maybe you can tell us a bit about that research. For example, is there a certain research paradigm that you've employed throughout?

Tetlock: Well, we make a concerted effort to track that accuracy of expert judgment and that means getting experts to make predictions, and then waiting for the time interval to elapse, and then checking who go what right.

Dr. Dave: Okay, and what sorts of predictions have you studied?

Tetlock: A wide range of predictions. Some of them are economic, having to do with economic growth and inflation; unemployment; a few of them have to do with stock market averages; some of them have to do with whether political leaders or political parties will be in power within given time ranges; some of them have to do with whether countries will stay intact, orders will change; some of them have to do with nuclear proliferation; a really wide range of questions.

Dr. Dave: Okay, maybe you can give our listeners an overview of the book. What are the main points that you wanted to bring out?

Tetlock: Well, one of them was that experts tend to know less than they claim to know. When experts - you look at a lot of expert predictions, um, you look at all those times when experts said they were 90% confident something would happen. You'll find that things typically do not happen 90% of the time. Things happen closer to 70% of the time and when experts are 70% confident, things tend to happen more like 50% of the time. So the futures that experts judge as most likely are rarely as likely as the experts claim. So there's either overconfidence or overclaiming. That's probably the finding that most people have latched onto from the book.

Dr. Dave: Well that's fairly alarming to hear given that there are some really big contentious issues facing all of us. For example, I think of peak oil, global warming, the nuclear intention of Iran, and there are political experts on both sides of the fence for each of those issues, you know. Some saying we're about to run out of oil, others who say no, no way, we're not going to run out of oil for another 50 or 100 years. So if I understand you correctly, it would seem that we should be distrustful of political experts. But don't political experts have a lot of influence on our national policy?

Tetlock: Well, I would suggest a couple of things: One is that experts certainly, on average, know less about the future than they claim to know. Now that doesn't mean experts know nothing about the future or that you'd be just as well off, you know, resorting to a dart throwing chimpanzee; although, sometimes the experts are that bad and sometimes you are just as well off with a chimpanzee. Political experts have a great deal of influence on policy; although, of cynics argue that it's more in the role of justifying policy after the fact, but I think that's too cynical. I think political experts do feed into policy and that whenever a liberal or conservative administration comes into Washington, they bring their own teams of experts with them. Uh, and they do that not just for justification and PR purposes. So yes, experts are important. The other thing I would say is that - and this is more of a precautionary comment - we find in the book repeatedly, that experts know less than they claim to know. That when experts say they are 90% confident something is going to occur, the more appropriate confidence is typically between 65%-70%; that experts are systematically overconfident. . .

Dr. Dave: Wow.

Tetlock: . . . they exaggerate their knowledge claims.

Dr. Dave: Now why is it that experts get it wrong compared to average well-informed people?

Tetlock: I'm sorry?

Dr. Dave: I say why is it that experts get it wrong - if I recall according to your book that average well-informed people often do better in their predictions than the experts?

Tetlock: I wouldn't say they do better. What we did is we had experts make predictions in the domain of their expertise and outside the domain of their expertise. So, if you're an expert on Russia, we also asked you to make predictions about South Africa and if you're an expert on South Africa, we also asked you to make predictions about Russia, and we find that when experts switch roles like that, there's not a big difference in how well they can predict. So people have dedicated decades often of study to a topic. That study does not readily translate into a great ability to predict economic or political trends in the region they have studied.

Dr. Dave: So in other words, they do no better in the area that they've studied, than they do in the area that they haven't studied?

Tetlock: That's a bit disconcerting to most people. . .

Dr. Dave: Yes. (laughs)

Tetlock: . . . and that's definitely true. Now, here's one minor positive thing that we can say about experts - and it's actually maybe not that minor - they do do somewhat better than chance; so they are doing somewhat better than the dart throwing chimpanzee. . .

Dr. Dave: Oh goodie! (laughs)

Tetlock: . . .uh, but they're not doing better than simple extrapolation algorithms. So, they're not doing better than a simple rule like predict the most recent rate of change, or predict that nothing will change.

Dr. Dave: Mm-hmm

Tetlock: Rules like that over, you know, 1000s and 1000s of predictions do better than most experts.

Dr. Dave: Now how do the experts react when they find out that their predictions are wrong?

Tetlock: Well, in various ways. Uh, some react more defensively than others. It's not unusual for experts to argue that there is something wrong with our questions whether than with our answers.

Dr. Dave: Mm-hmm.

Tetlock: Uh, it's not unusual for experts to argue that although they predicted "x" - say they predicted the disintegration of Canada and that hasn't happened in the specified timeframe, it will pretty soon - so they're just off on timing. Or you know for example, experts who predicted Dow 36,000 could argue that, well, Dow 36,000 will eventually arrive.

Dr. Dave: Right. (laughs)

Tetlock: We've taken a bit of a detour here in the first decade of the 21st century, but I knew that it will arrive at some point. And the Castro regime in Cuba, which people have been over predicting it's fall for a long time - it's gonna fall eventually. Perhaps Canada will disintegrate eventually and so forth. So, it's not unusual for experts to invoke what we call belief system defenses - saying that it's wrong to classify them as wrong; they're answers are better classified as nearly correct, rather than clearly wrong.

Dr. Dave: Yeah.

Tetlock: Uh, so that's not an unusual reaction.

Dr. Dave: It sounds a lot like human nature somehow.

Tetlock: There's a strong element of rationalization.

Dr. Dave: (laughs) Right. Exactly. And yet these experts - I mean the people who we see on the news every night as political pendants, and so on - somehow they're failures don't seem to put them out of business. How do you account for that?

Tetlock: Well, uh, that's because people in the media have very little interest in keeping score. I think experts do not serve primarily a useful prediction function in the eyes of the media; they serve an entertainment function.

Dr. Dave: Mm-hmm.

Tetlock: They want experts who will deliver quotable quotes, who will deliver exciting predictions. I mean, if you had a choice between two experts - one of whom was right and predicted correctly in 1992 that the Saudi regime would survive in the next 10 years, and the other one predicted that the Saudi regime was doomed and it would fall very, very soon and there would be a fundamentalist Islamic crew and there would be a terrible war, and bum, bum, bum. . . What makes for better TV?

Dr. Dave: Right, right.

Tetlock: And the idea, the answer is pretty obvious that the more entertaining scenario makes for better TV, even though it proves in retrospect to have been wrong. Incidentally, those people who are predicting a collapse of the Saudi government are still predicting it. That prediction is still very much alive as well. And some of these predictions are, no doubt, going to come true. So you want to be careful about dismissing belief system defenses as just rationalizations; some of them will pan out at some point. But this yellow line about "in the long run" - in the long run they are going to be right, but in the long run, we're also all going to be dead.

Dr. Dave: Yeah. Now in your book you categorize these prognosticators into hedgehogs and foxes. What do these terms designate and how come you chose those particular two species?

Tetlock: The choice came from an essay by Isaiah Berlin, in which he was quoting from a fragment of classic Greek poetry and the poem ran along the following lines: The fox knows many things, but the hedgehog knows one big thing. So the hedgehogs in our work were the people, the experts who tending to be guided by overarching ideology or theory. They also tended to be more extreme, so they tending to be more extremely optimistic about the future of the world, or more extremely pessimistic; so they were more like boomsters or more like doomsters.

Dr. Dave: Mm-hmm.

Tetlock: They tended to be more extremely liberal or more extremely conservative. So, there are people who are driven by one big theoretical or ideological idea and who tended to apply that idea over and over again. . .

Dr. Dave: Mm-hmm.

Tetlock: . . . without modifying it very much in response to prediction questions. And they paid a steep price in terms of predicted accuracy.

Dr. Dave: Uh-huh. Can you give us any examples of where the predictions of political pundits have led us astray in major ways?

Tetlock: (laughs)

Dr. Dave: (laughs)

Tetlock: Well, uh, how about the debate over welfare reform in 1996. That's a nice example where both the liberal and the conservative pundits got it wrong. When Clinton signed that Welfare Reform Bill in 1996, a lot of liberals thought he'd betrayed them and they felt that the

results would be disastrous, especially for single-parent families in inner cities. They predicted starvation in the streets and terrible scenarios. Uh, many conservatives predicted very rosy scenarios. That is would reinvigorate the work ethic in inner cities. That it would transform life in those places.

Dr. Dave: Right.

Tetlock: Well, it's almost 10 years now since 1996. What do we know? Well, there's a wonderful article recently published by Christopher Jenks, in which he notes that neither side turned out to be right and things really aren't very different at all in the inner city, and he goes on to explain the variety of factors that canceled each other out, uh, in producing that kind of an outcome. It's often the case that the foxes are content with making less glamorous predictions. So rather than predicting that it's going to transform life in a positive or negative way, they'll say, "Well, it's going to have a mixture of positive and negative effects, and in balance, things aren't going to be all that different."

Dr. Dave: I'll bet the hedgehogs are making a lot more money. . .

Tetlock: Uh, well, you. . .

Dr. Dave: ... with their extreme predictions.

Tetlock: . . . we don't actually measure incomes. . .

Dr. Dave: Yeah.

Tetlock: . . .but we do have some measures of fame and the hedgehogs do seem to me somewhat more famous.

Dr. Dave: Yeah, yeah. Now, doing all this research on political punditry, I would think it would be hard to keep your own politics out of the book and out of your research. Is that something that you attempt to do? And if so, is it hard to do?

Tetlock: I try really hard to do that.

Dr. Dave: Uh-huh.

Tetlock: I consider that to be absolutely critical for this project. Uh, at the very beginning of the book I state that the goal is really a goal that many political scientists think of as naïve. I want to create some reasonable nonpartisan transideological benchmarks for judging judgment;

standards that can't just be dismissed as a trap that a liberal or conservative professor has concocted in order to trip up his adversaries.

Dr. Dave: Right.

Tetlock: And that's just a very hard thing to do. If it were easy to do, I think it would've already been done.

Dr. Dave: Yeah.

Tetlock: There certainly are people who have argued that the book is in one direction or another biased, but I take some heart to the fact that there are claims of bias from both directions.

Dr. Dave: Mm-hmm. What sort of measures did you take to avoid that bias?

Tetlock: Well, one thing we did is we tried to design questions that were open to as little... questions that would have answers; that would be open to as little interpretation as possible. So, in designing questions, for example, we wouldn't ask "Where do you think events are going in Poland in the next 10 years?" We would ask them questions like "How much larger will GDP be in 10 years," uh, "How likely is it the current political party will be in charge," or some alternative to it. "How large will government be as a fraction to the total economy?" "What will happen to inflation?" "How big will the armed forces be?" Do you get the flavor of those?

Dr. Dave: Yeah, and I. . .

Tetlock: So they are the sort of things that you could look up later in a political encyclopedia. . . (laughs)

Dr. Dave: Mm-hmm.

Tetlock: . . . and you can say, hmm, you got that one right, you got that one wrong.

Dr. Dave: And I recall reading that you often would phrase questions in a way with three alternatives that whatever the phenomenon was, would either become more so, stay the same, or become less so.

Tetlock: Right. And, and, even there, we wanted to reduce the wiggle room so we would say something like, "Well, government debt as a fraction of GDP right now is 35%, do you think it's going to stay within +/- 5% of that in the next 10 years?" "Do you think it's going to fall below that range or above that range?" So again, we would have precise answers that can be

scored for accuracy and there are issues on which liberals and conservatives cannot really all that reasonable disagree.

Dr. Dave: Right, and have you struggled at all with the seeming paradox that you are an expert on telling people not to trust experts?

Tetlock: I've been asked that question a number of times. . .

Dr. Dave: (laughs)

Tetlock: . . . and there is an element of paradox to it.

Dr. Dave: Yeah.

Tetlock: I consider it to be the best question I've been asked. What I would say to that is there are lots of reasons for being skeptical of my expertise on expertise. Any given study in this area is going to have flaws and my work certainly has some flaws. Um, there is no guarantee that going forward, the same patterns will be found for hedgehogs or foxes. Going forward, there's no guarantee that experts will do quite as poorly as they did in this particular set of studies. I think what I want to encourage is a more thoughtful attitude toward how we think about expertise. I think you can accept the current results and say I think probably would hold up, but I think the key word is probably. I think you can deny the current results and say the probably wouldn't hold up for various reasons, due to various flaws, or due to the changing nature of the world. But again, I think it would be important to articulate the reasons, the grounds for the belief, and ideally, it would be great if people would actually go out and test these ideas. I think it is odd. . . I think when historians look back on this period, I think they would consider it odd that we've put so much weight on expert opinion and made so few efforts to hold them in any sense, rigorously accountable for the views they're expressing.

Dr. Dave: Mm-hmm. I've. . .

Tetlock: An odd thing for a democracy to do.

Dr. Dave: So, it sounds like in what you're saying somewhere in there, there is a call to action on the part of your readers. What's that call to action that you're giving us?

Tetlock: Well I'm not sure how much the general public can do to change this. It's very. . . I mean they can certainly vote with their remote controls and decide I don't want to listen to punditry unless the punditry has been monitored in some systematic way.

Dr. Dave: Yeah.

Tetlock: But, there really aren't a lot of choices like that and people do like entertainment, frankly, so I'm not all that optimistic that change is going to come from the bottom up. I'm a little bit more optimistic, but not terrible optimistic, that change could come from the top down. That you could persuade influential people and major newspapers and major foundations that it would be a good idea to support mechanism from our monitoring expertise. I think for example, the New York Times and the Wall Street Journal were to agree to set up a system for monitoring punditry. It couldn't be easily dismissed as liberal or conservative.

Dr. Dave: Mm-hmm.

Tetlock: And it would be hard for pundits to resist participating.

Dr. Dave: In other words they would track and report back on the accuracy of the predictions and assertions that the pundits had made?

Tetlock: Some measure of keeping score.

Dr. Dave: Mm-hmm.

Tetlock: I think that would make people a lot more careful about what they claim, frankly.

Dr. Dave: Yeah.

Tetlock: And I think it help balance and improve the liberative process in democracy.

Dr. Dave: It certainly sounds like it would. You said you didn't think it could come from the bottom up, but that made me think about blogging and the whole phenomenon of political blogs and uh, blog journalism if you will. It seems to me that maybe that is having somewhat of an impact from the bottom up.

Tetlock: That's a very interesting point. I'm at that age that I don't know much about the blog world, but here's my sense and I'm open to being corrected on this. My senses to the blog world are not all that different from the non-blog world, that there is a lot of partisanship in the blog world.

Dr. Dave: Mm-hmm.

Tetlock: Um, if it is the case - if I'm wrong and if it is the case - that in the blog world there are more thoughtful nonpartisan mechanisms for judging judgment. I think that would be great Shrink Rap Radio #19, Predictive Errors of Political Experts:

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thing and it's a potential mechanism for achieving - I think it's another mechanism in the internet world that (it's not just the internet world but it's certainly in the internet world) and that is prediction markets. I think prediction markets are useful mechanisms preventing people to put their money where their mouths are.

Dr. Dave: Well you've been at this line of research for about 20 years. What was it that drew you into this line of research in the first place?

Tetlock: It was yet another one of these intractable political debates that periodically erupt between liberals and conservatives in American life and this was the debate about the Soviet Union in the mid-1980s where liberals were arguing that Reagan was driving the Soviet Union into Neo-Stalanism and greater repression and greater expansion and greater risk of war. And conservatives were arguing that the Soviet Union could not be changed; that it was hopelessly totalitarian and the best you could do would be to contain it the way Reagan was doing and everybody managed to transform their predictions after they found out what happened.

Dr. Dave: (laughs)

Tetlock: Liberals argued that Reagan was not dangerous, but he was irrelevant because the Soviet Union was going to collapse on its own anyway and conservatives argued that, well, maybe the Soviet Union was not so unchangeable after all and by putting adequate pressure on it, it would collapse. Very few were actually upfront predicting anything close to collapse. They were actually closer to predicting the opposite of Gorbechev, which was a repression; greater repression rather than greater liberalization. So, each side was wrong in a different way. (laughs)

Dr. Dave: Yeah

Tetlock: But each side after the fact, was able to claim a victory of course. So it was that particular episode that galvanized my resolve to do something along these lines.

Dr. Dave: Mm-hmm. Well I really have to solute your ambition and willingness to tackle such a big and important issue as that is. Does that come out of a background in social psychology? Is that what your training is in?

Tetlock: The background in my training?

Dr. Dave: Yeah, maybe you can give us. . . you know some percentage of my listeners are psychology students or people who are interested maybe in a career in psychology. Maybe you could give us a brief overview of your schooling and career trajectory.

Tetlock: I think when I went into graduate school in the mid-1970s - I went to graduate school at Yale - I guess probably the most famous person I worked was Irv Janis who is, you know Mr. Groupthink, um, but I worked with a number of other people at Yale who were interested in issues at the interface between psychology and political science.

Dr. Dave: Now were you a psych major as an undergraduate?

Tetlock: Yes I was.

Dr. Dave: Okay.

Tetlock: But I was from Canada, the University of British Columbia, so I moved down to the United States for graduate school in 1976. I graduated in 1979 and moved to Berkeley as an assistant professor in 1979 and I worked my way up the ranks at Berkeley up until about 1995. I left Berkeley, moved to Ohio State for five or six years, and then I moved back to Berkeley, but this time I moved back into the business school, rather than the psychology.

Dr. Dave: It's always interesting the different corners that psychologists end up in. How did you end up in the business school?

Tetlock: It turns out that people in the business world, I think, are significantly more openminded than people in the political world.

Dr. Dave: Uh-huh, uh-huh.

Tetlock: They are more interested in what works. They have certain pragmatism to them. . .

Dr. Dave: Yes

Tetlock: . . . where as people in the political world are often much more interesting in posturing and determining who is more moral than whom.

Dr. Dave: Right.

Tetlock: But people in the business world have a very pragmatic interest in prediction so I actually find that pragmatism quite refreshing and quite different from what I've observed mostly in the political world.

Dr. Dave: You know me too, because uh, for more than 20 years now I've been involved doing qualitative research and while I went through a Ph. D program in clinical psychology at the

University of Michigan, I never heard the term qualitative research until I got into the business world. . .

Tetlock: Mm-hmm.

Dr. Dave: . . . where they were willing to take seriously and gamble large amounts of money on listening to what people have to say. So, I've found that pragmatism to be very refreshing because it kind of fits both with my training and with my personal disposition.

Tetlock: I think that's a great example. I think the methodology often becomes the end rather than the means to the end.

Dr. Dave: Yeah.

Tetlock: Where the kind of method you use is a statement of whether you are on the right side or the wrong side of philosophical divide.

Dr. Dave: Uh-huh.

Tetlock: Uh, like a measure of virtue. (laughs)

Dr. Dave: Yes. Right, right. Certainly in psychology there was worshiping at the altar of quantitative science, but that's a whole other discussion. What was it that drew you into psychology in the first place? What was it that was calling to you about psychology?

Tetlock: Probably not all that different from a lot of psychologists. I mean curiosity about how the human mind works. I'm somewhat introspective and I'm curious about those mechanisms.

Dr. Dave: Okay.

Tetlock: Thinking about thinking of something that I've enjoyed doing.

Dr. Dave: Yeah.

Tetlock: I enjoyed doing it before I went into psychology. I enjoyed it afterwards. I think there are fascinating individual differences in how people approach that.

Dr. Dave: And when you were at Yale in your doctoral program, was there a certain specialization within. . . for example, I said I went through a clinical psychology program; was there a certain kind of psychology that you were initially trained in?

Tetlock: I'm usually classified as a social psychologist.

Dr. Dave: Yeah, that's what I thought. What's been your biggest source of joy or fulfillment as you look back on your psychological career?

Tetlock: I think this project has been the most important project that I've ever done, by I think in order of magnitude. Virtually every other project that I've done has been much smaller in scope and ambition. . .

Dr. Dave: Mm-hmm.

Tetlock: . . . and certainly this has taken a much larger fraction of my life. . . (laughs)

Dr. Dave: Right, right.

Tetlock: . . . in terms of how long it has lasted.

Dr. Dave: Yeah. Yeah. And what's been your biggest frustration with the field of psychology, if any?

Tetlock: I think psychology is evolving mostly away from where my interests lie. I think it is quite understandable that psychologists have moved more in the direction of cognitive neuroscience. . .

Dr. Dave: Mm-hmm.

Tetlock: . . . and we have these new high-tech methods of monitoring brain metabolism and I think that's very interesting and very important, but it's just not a level of analysis of which I work; so it's been more natural to move toward political science and organizational behavior and other fields like that.

Dr. Dave: Right.

Tetlock: So I would say that the increasingly reductionism to focus on psychology has probably caused both the discipline. . . I am moving in a more macro-societal direction and it's moving in a more micro-brain oriented direction.

Dr. Dave: Mm-hmm. Right. I was just going to mention something about reductionism because that's exactly. . . I see that as a possible pitfall. Well, we're winding up here and I'm wondering if other than your own writing, is there a book that has had a major influence on you, either as a psychologist or in your personal life? Some book that you'd like to recommend to our readers?

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Tetlock: When I was an undergraduate, I enjoyed reading things at the interface between philosophy and psychology, so I really was influenced quite a bit by a very well writing philosophy and science book by Abraham Kaplan called *The Conduct of Inquiry* and I think that shaped me in some formative ways.

Dr. Dave: Well, I really want to thank you for your generosity in granting this interview. It's been fun for me and I'm sure it will be informative to our audience.

Tetlock: Well, thank you for the opportunity.