



**Interview: Ray Dalio
Hedge Fund Master**

October 27, 2012

Washington, D.C.

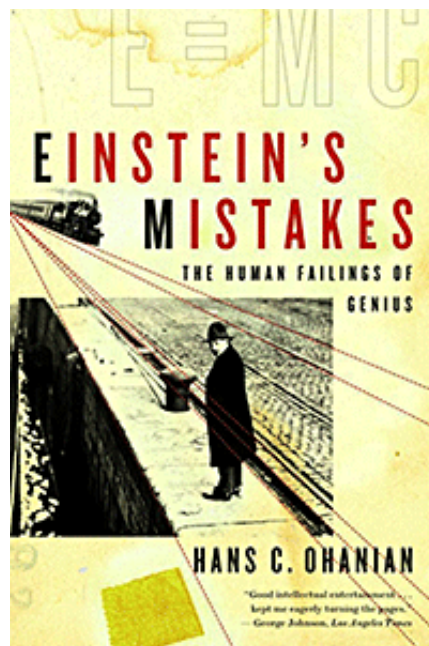
[Back to Ray Dalio Interview](#)

You've spoken about individuals who shape the world we live in and the particular qualities they share. What is the process these people, "the shapers," go through that perhaps the rest of us do not?

Ray Dalio: I think for everybody, in order to be successful, there are five steps that you go through essentially. But everybody has their goals. What is their goal and passion? So you have goals. And then what happens is you're going after your goals and you encounter your problems. So encountering problems, and then the big difference between people is how they approach those problems. People who get bummed out by the problems don't learn from it. Who learns from them? So those who recognized the problems are excited that they get into those problems or mistakes. Mistakes are learning experiences. The pain that comes for that mistake, every time you have pain it's an indication that something is at odds. So the people who have the pain are the people then who will go into that and realize that if they solve that pain, solve that problem, understand what that is representative of -- not just the one problem -- but that problem is a certain type of problem that will happen over and over and over again in your life, and if you can solve, "How do I deal with that kind of problem?" The third thing that everybody needs to do is, if they have problems on the way to their goals, that they diagnose those problems and they get to the root cause -- the real root cause. The real root is often -- is typically -- what people are like. Can you go to what you're like? Can you go to your mistakes? Can you go to your weaknesses? Right. Can you go to other people's mistakes and weakness? Some people, because of ego barrier, can't do that, so if they don't recognize their own mistakes, their own weaknesses, or other's mistakes and weaknesses -- what the root cause may be and what they're like because of ego barriers -- if they can't go there, they're going to repeat those mistakes. They're going to have them over and over again. So it's the process essentially of saying, at that stage, "What am I like?" Everybody has strengths and everybody has weaknesses. The weaknesses are the other side of the strengths. So let's say if you're a right brain/creative person, you may not

be reliable. Because just the way you think necessitates you to think a certain way, that means you can't think in another way. That means you're going to keep bumping into that thing that's standing in your way. But unless you can embrace, "I'm not reliable," right, and deal with it, you won't get around it. It's still going to continue to be a barrier. Right. So the diagnosis to the root cause is important. So then if you diagnose, then you have to design what you are going to do about it that works. So let's say you are very creative but not reliable. Okay, you have to find the means of first of all embracing that, and then saying, "If I'm not reliable, what do I? Do I work with a reliable person? Do I learn reliability? Do I have some compensating mechanism?" Because I can't let that lack of reliability stand in the way of my goal. As long as I keep doing that I'm going to keep running into problems.

So you have to design what you do about the problems. And then when you're designing what to do about the problems, you have to follow it through. You have to follow through, or do the thing you design. Doing the thing you design requires self-discipline and so on. People have to do those things in order to be successful. Right. They have to know what their goals are. They have to diagnose their problems down to the root cause, the real root cause. They have to design ways to get around them, and then they have to have the self-discipline to follow that. It's a continuous iterative process. So that's what we keep doing. I would say that all of the shapers are doing that. So they don't mind the problems. That's their adventure. A wonderful book is *Einstein's Mistakes*. You hear his struggles. He wouldn't have been cutting-edge, he wouldn't have been inventive if he didn't go through that. So when you're looking at the personality characteristics, the personality characteristics lend themselves to doing that five-step process well.



In his book *The Outliers*, Malcolm Gladwell says it takes something like 10,000 hours of working at something to become remarkable, to become extraordinary. I think you're also describing a person who is very driven, who has great tenacity and doesn't let things get in the way of the goal.

Ray Dalio: Yes, of course. It's an element, but...

It's the mixture of the elements that matter. You could have a tremendous tenacity, but you're studying, you're learning, you're trying to memorize and remember everything that you're being taught and you're really trying hard. You could have great tenacity. You need the making sense of something, you need to embrace reality. You need these other dimensions. Right. So I think the things that we started to talk about just before, the things that these people have a need for is: First, they need to -- most fundamentally - make sense of things, which is a very different kind of learning process. It's a very internalized learning process. It's not a memory-based process. So none of these people -- unlike the population as a whole -- none of these people have a desire to follow instructions.

How is that different from other people?

Ray Dalio: For most people, you go to school, they tell you what class to go to, what classes to take. This goes on all the way through university. "Do this, do this, do this..." and then you go into the class and they say, "Learn this," and, "This is the information," and it's a largely memory-based and instructional-based process. This is not what these people do. Right? This is not. So the path, what they have is a strong, strong desire to understand and make sense of reality. How does reality work? So they're all very independent-thinking and, and rebellious.

They don't mind saying, "Screw you. This is what makes sense and I've got to go down that path." They're comfortable with ambiguity. They love ambiguity. Some people don't like ambiguity. Most people, they say, "I'm nervous about ambiguity." They love to go in the space of what's ambiguous, because that's where the discovery is. They love making mistakes, the process, they understand that making mistakes -- you know, loosen up! It's like you're going to ski or something. You can't learn how to ski unless you're falling. So they don't mind the falling. They're not embarrassed about making mistakes. They're not worried also about the approval of others. So many people are constantly saying, "Oh well, risk!" The whole different definition of risk -- what's risky? They're not worried about what people think of them, right? Is that risk or failure? The term of failure is a totally different thing. Failure is part of a learning process. Right? What's the risk of failure? What, you'll be embarrassed? Risk of failure? How do you distinguish failure from learning? In your whole life, "failure" implies that it stopped, that the game stops. If it's part of a "You're failing and then you learn," then that learning is part of the moving forward. So that is what the process is like. Fail, learn, move forward. And constantly do that, because you're cutting-edge. You're going where people haven't been before, in inventiveness. That's exciting to those people. So that's a different kind of approach to life. It's a different way of being.

You said earlier that "ego barriers" keep people from recognizing their own weaknesses. Why is that, and where did you get your ability to look at your own weaknesses?

Ray Dalio: You're asking a two-part question, so I think I probably should explain what I mean by this ego thing. I think that the ego barrier is the worst problem. This is going to take a few minutes.

People are so attached to being right, and yet the tragedy is it could be so easy to find out how you're wrong. If you just said to yourself, "I'm not sure that I'm right, and let me go find people who have alternative point of views and let me have quality conversations." Not to pay attention to their conclusions, but to the thought process. So thoughtful discussion, worrying about being wrong but not to the sense of being paralyzed. Or moving forward, but in the sense of trying to create discovery, to have an exchange. To go after the person who has the most different point of view, who is the most thoughtful, and then have a conversation to see their point of view. Whether a person could be both open-minded and assertive at the same time, that creates a discovery process. It creates a fabulous learning. That process itself reduces the probability of being wrong and produces a great deal of learning. People are so hung up on being right. Starting their discussion and deriving some sort of satisfaction if, at the end of the discussion, they were where they began the discussion. That doesn't make any sense, because there's not going to be any learning. So ego plays an important role in that. The people that feel like, "I'm good. I've got it," won't learn. If you've got it, you won't learn. So you have to get rid of this ego barrier, "I've got it" thing.

Every human being has weaknesses. And, as I say, it's the opposite side of thinking. In other words, if you have a brain that works one way, and you're doing certain things that allow you to do things that way that you're excelling, it means that your brain is working in a manner that has its pluses that will cause minuses. So the creative person who is not reliable, or the reliable person who is not creative. But if they don't embrace that they're going to continue to encounter that. Ego barrier is the worst thing, and if we were raised differently, just imagine in the schools all along that people will always say, "Everybody makes mistakes. Everybody has weaknesses. The key is really to understand what your mistakes and weaknesses are so that you can learn from them." I think punishment is a terrible concept. Punishment means that you made a mistake and you're being punished. I think instead of punishment, every time somebody makes a mistake you should say, "The only thing that you need to do to get out of your punishment is, first, think, "What kind of mistake was that?" So if I'm in a situation like that again, how would I deal with it differently? Not to make that mistake. So that learning should come from the mistake, not punishment, because you're teaching people not to make mistakes, which is where

the learning comes from. Not the appreciation that if you keep doing this over and over again, you're going to keep encountering the same outcomes.

How did you first become involved in the markets, in trading?

Ray Dalio: In my particular case I started trading markets when I was a kid, when was 12. And the markets -- there are certain things about being in the markets, in terms of decision making, that are unique, that encourage this kind of thinking. First, because all of the consensus is already baked into the price. In order to be correct in the markets, in order to make money in the markets, you have to see something that the consensus doesn't see. So you have to have an independent point of view. Very different than most other professions. Most other professions you can build on existing knowledge. You don't have to have a point of view. If you're a doctor and somebody breaks a leg or whatever, you can repair that leg. It's not zero-sum, in the sense that you have to be smarter than the next person or different from the consensus. Now in order to be different from the consensus, there's a high risk you're going to be wrong. So for me, if I form that point of view and I'm wrong... the probability of being wrong I'm trying to reduce. So by having other people stress-test my thinking, it's very practical, right?

I work really hard to have this independent point of view, and then I bring that independent point of view out there and I say, "Shoot at it. How am I going to be wrong?" So let's have that quality back-and-forth. And so that was just a practical approach. Find people of alternative points of view and have quality conversations back and forth. Not to let them think for me, not for me to follow their point of view, but for me to understand the different perspectives. Right? Very, very practical. Because it increases my probability of being right, and it reduces my probability of being wrong. And what I've discovered in that process is that I was learning so much. So just imagine what a fantastic path to think, "Let me go after the person who has got the opposite point of view, who is really smart, and let me have quality conversations, quality disagreement." So in my case, it was very much motivated by that, and then I have clear measures of whether I'm right or wrong, so there's a clear accountability. In other words, I could do whatever I want, it's my responsibility if I made a purchase for a sale, I can measure on a day-to-day basis how good that process is. So I get clear feedback. The goal is: don't be too wrong. Be more right than wrong. So in that process I can take personal accountability. If I don't learn personal accountability, if I don't learn, then I'm going to pay a terrible price. So that process itself lent itself to this kind of very open-minded decision. Also the making mistakes, and the loving the mistakes.

We have a culture of radical transparency. So every meeting is taped and made available for everybody in the company to look at. And all we have are conversations of, "What makes sense?" Everybody has the right to make sense of things. Now in that environment I get to see how differently people think. I realize how radically different people think. So that was a curiosity to me. Really. Because it's masked, you have no idea what's going on behind other people's eyeballs. You know, they're in their heads. They all look a lot alike but their brains work so differently. So that led me to brain science. In other words so I'm very, very interested in understanding literally how the brain works and the physiology of the brain. We have different physiologies. So what we think is just our interpretations, our things like love. Love is physiological. There is a chemical in your brain -- I forgot the name it begins with "o" (oxytocin) -- that is where love comes from. So this physiology, our brains, are structured differently. When you start to realize that the brain is very much like the body -- in other words there are parts of your body you can exercise and change certain parts of that. You have a certain body, and maybe you can get more muscular to a certain degree and maybe you can't. Then there are parts of your brain, parts of your body that you can't change. You can't change your bone structure. That's just the reality of the brain. And that is what people are like. So the recognition of that, the embracing of that reality is great, yet we don't talk about that, and that's a tragedy.

It takes a lot of guts to go there.

Ray Dalio: You say, "It takes guts to go there." It's the motivation, it's the curiosity. It's the going wherever reality is, because it's practical. In other words, if you want to go to truth, what is the guts, what's the fear? Tell me what you think is the fear? What are you fearful of? Why is it gutsy?

Because you'll hear things that make you uncomfortable, and a lot of people don't want to feel uncomfortable.

Ray Dalio: Reality is reality. Which is going to produce more discomfort, denying reality? I call the harsh truths -- they're all harsh truth -- things you wish were not the case. Okay, but they're truths. Do you want to know about them or do you not want to know about them? It's practical to know about them. If you want to make success, it's practical to know about all those harsh realities. Know about the harsh realities and then deal with the harsh realities. The person who doesn't want to go there is not going to know the harsh realities and they're not going to make progress. The person who loves to know all -- what reality is, whatever it is -- is going to know how to deal with reality in the best possible way. So what's the fear?

It sounds like there's actually less of a risk if you're willing to see the other side instead of sticking to your guns.

Ray Dalio: Well, you're learning. You can reject their opinion. You can bring all this information together and then form your own opinion. "Let me see that perspective." It brings from knowledgeable people, from thoughtful people, those things, and then you can assess that -- "Does that make sense?" -- and also test yours. In other words, you ask them the question, "But gee, it doesn't seem that way." So have that dialogue. They should do it open-mindedly. If you can say, "Can we really have an open-minded dialogue, so that you can consider what I'm saying and I can consider what you're saying?" We're in a path to try to find out what's true. Even the presumptions, the cause/effect relationships...

Everything works like a machine. Everything, every outcome, has causes. So when you think of it as, "Let's state what our machine is. How does the world work? How does reality work?" And have a conversation, "How does reality work?" And if we can agree it works this way, then you can say, "Okay, now let's put in the circumstances, and that will mean that these things will happen. That's the cause/effect relationship." If you can work through conversations and you say, "Actually, reality works that way," that's what the conversation can provide.

Your dad was a jazz musician, is that right? What was that like?

I'm thinking. Which dimension?

Ray Dalio: I think it had an effect on me, in terms of always liking improvisation. I always respected that ability. But also, he was out late at nights, and so he slept later in the day and it affected how our relationship was. Right. Anyway, watching him play jazz and how we had that communication, I think, played some effect. But you know, for me, I was also an only child, and I think that maybe being an only child played a role. I don't know. I can't psychoanalyze myself, but maybe the being there alone and having time to think played a role. And then also I would go out and play with my friends. I love relationships. For me, meaningful work and meaningful relationships are what it's all about. That's where I'm coming from. In other words, the passion for the work -- and I love that shaping or learning or how reality works, and I like to do that with a group of people -- my relationships are very, very important. My family, my friends, all of those. So meaningful work and meaningful relationships are very important to me. I don't know. It's very difficult for me to psychoanalyze myself and

where that all came from.

Growing up, were those personal relationships more important to you than school, learning by rote, and things like that?

Ray Dalio: I hated, I hated school. I really hated school. I hated school generally, because it was this instruction-following thing. No. I bet you it's probably also because I wasn't good at it. I mean I suspect I wasn't good at it. Maybe to some extent it was that, yes, I wanted to pursue the understanding. I always liked the understanding. But I think I was just built that way. So some people it sticks and some people... like I've got a great conceptual memory and a terrible rote memory. So if I have a story, I could tell you year by year what happened within a story, within a context. But if I was to go into like a memory-based learning, it's terrible. I have a terrible rote memory.

You ended up at Harvard Business School, so you must have had some academic skills.

Ray Dalio: My situation was, I did terribly in high school. I hated high school. I just wouldn't study. I would remember that my mother would send me to my room and say, "You have to study," And I wouldn't study. I would do anything. I would be alone in the room. I would find something to think about or do and I wouldn't study, and I did terrible in high school. I barely got into a college. C.W. Post College, which people... it was a great college for me at the time. It was only then that I could begin to pick my courses. So then I began to pick things that were interesting to me, and then it was exciting. I loved it. And then you had the free time. Like college -- other school, most of the time you go in at a certain time, the bell rings, you go to the next class, it's packed in. In college there was freedom. I always loved freedom. I remember when I got my car, or whatever it would be, anything that brought me freedom I loved. So college allowed me freedom, the freedom to choose the subjects, the ones that I was interested in, the freedom of time. So I did very well in college and then I went to Harvard Business School.

You were 12 when you bought your first shares of Northeast Airlines. That's a little bit unusual for a 12-year-old. Were you looking to make money on the side?

Ray Dalio: Well, it was interesting. At the time, I caddied at a local golf course on Long Island. It was very elite in a sense.

I caddied for Richard Nixon. I caddied for the Duke of Windsor. I caddied for very interesting people at that golf course. And at the time, also, there was the Wall Street crowd. This was in the '60s, and at the time the United States was on top of the world. Stocks kept going up and everybody talked about the stock market. So it looks precocious, more precocious than it was. It was just what people were talking about, and I certainly was interested in having those conversations, and I was interested in that experience. So yes, I bought stocks, or I bought a stock -- Northeast Airlines -- and it was the first stock I bought. And my whole criteria -- it was the only company I ever heard of that was selling for less than \$5.00 a share, and I figured if it's less than \$5.00 a share I can buy more shares. I mean, dumb, right? But it turned out that that company was about to be acquired, was about to go broke. Somebody acquired it and it tripled, or went up a lot, and I made money. And then as a result of that, I got interested, and it was the thing to talk about, so I could talk with Wall Street people, when we were walking down the course, about what stocks were good and bad and interaction. And because I was speaking to them about the stock market, and they were really nice people, we had those quality conversations, and then I began the process.

So that was actually quite formative.

Ray Dalio: Oh yeah. Oh yeah. That was very formative.

After Harvard, you worked on the floor of the New York Stock Exchange for awhile, didn't you?

Ray Dalio: In the summer between college and going to Harvard Business School, I clerked on the floor of the Stock Exchange, which was in 1971 when there was the monetary system breakdown, which was an unbelievable experience and it was... Well, I was wrong many times in the markets up to that, but this was one of those really telling times. So imagine you're... I followed developments day by day up until the breakdown. What I was seeing was the world financial system -- money as we knew it -- dollars were not being accepted. We had large debts around the world, and these dollars were not being accepted, and big prices. And it came to a head on August 15, 1971, when I was clerking on the floor of the Exchange. President Nixon on Sunday night gets in front of the television and announces the floating of the dollar. In other words, we're going off the gold standard, and at that time money had no value except as a claim against gold, because money was like checks in your checkbook. It had no value, no intrinsic value. So now there was going to be the severing of the relationship. It's like, "Now you can keep the checks but you can't have the money that's in the bank." And so that, I figured, what a shock! And I walked onto the floor of the New York Stock Exchange where I'm clerking, and I come there and the stock market went up the most it ever went up in a long time, many years. That was the first time that happened, and I said... and I wasn't prepared for the fact that this was a currency devaluation.

At the time, none of us really understood the relationship, because it had never happened in our lifetimes before. So I started to do research. I always wanted to understand how it made sense.

I realized that there were currency devaluations that happened many times in history. For example, in 1933, March of 1933, in the Great Depression, the same thing happened for the same reasons. There was too much debt and they had to print money. And when you print money you have this kind of effect. And these experiences then, all through my development, I found that there were many things that have never happened in my lifetime before, or the lifetime of the people that I was operating with, the marketplace. The people in the market, mostly, were very, very much responsive to their experiences, particularly their more recent experiences. So it was a pattern that I would see, of surprise. We would be surprised because we were stuck in our presumption that our recent experiences were going to continue.

What did you learn from this?

Ray Dalio: What I learned is to be surprised. I learned by the surprises, and then when I was surprised it's only because I didn't understand the cause/effect relationship. Everything happens because there are causes to make it happen. Everything, right? Okay, now what I looked at -- each one of those -- that thing, did it ever happen before? And I went back in history and I saw these things happening before, for the same cause/effect relationships. And then I realized that everything, everything that happens is just "another one of those." Right. The same thing happens. It may be, I don't know, if you're skiing and you make a turn, that's called skiing, and make a turn and there is "one of those" and they repeat. How does reality work? What's the cause/effect relationship? So that if you're encountering "one of those" -- a learning experience, anything, a birth, a marriage, an economic downturn -- if you encounter any of those, they have all happened before. A deleveraging. So that's why we anticipated the deleveraging before the 2008 downturn in the economy. It's a very good example of what we're talking about. There's a machine. Everything works like a machine. I mean those are cause/effect relationships. So in order to understand the machine and understand it through time, you have to see how those cause/effect relationships works. Particularly big events. Deleveragings have happened throughout history. You can go back thousands of years, hundreds of years, they always have happened, because there's a certain nature to a debt cycle and how that works.

Speaking of the debt cycle, could you tell us how that works?

Ray Dalio: Yeah, what happens is debt rises faster than income.

When debt rises faster than income, you get to spend more. So I'll explain in brief. Let's imagine you're earning \$100,000 a year and you have no debt. Then I can go out and borrow, because I have no debt I can go to the bank and I can borrow, and let's say they lend me \$10,000 a year. So now I have \$110,000 a year that I could spend. When I spend that \$110,000, somebody else earns \$110,000, so that causes their earnings to go up. As their earnings go up they also can go to the bank, and so you build a cycle in which debt rises faster than income. Most importantly, the debt rises faster than the ability to service income. So that is a self-reinforcing upward cycle. It causes asset prices to rise, because if incomes are rising, companies are doing better. So their earnings do better and so people with debt can buy goods, services, or financial assets, and those things cause them to go up. So there's a debt expansion, but obviously debt can't rise faster than income forever.

Usually when we had a downturn, you'd lower interest rates because lowering interest rates would have stimulative effects on the economy. First, when we lower interest rates it has the effect of making it easier to service your debt. Lower interest rates make it easier to service the debt. Also, it makes items that are bought on credit cheaper; your monthly payments go down. If you buy a car or a house, your monthly payments go down if interest rates are lower. So it makes it cheaper, meaning you could afford more, so it stimulates the economy. And it also has the effect of raising assets' prices, because assets -- if you have an income stream, it could be renting a property -- you're comparing it with the going interest rate, and if the interest rate goes down the value of the asset goes up. So it has a wealth affect. So as the economy works, when there were lower interest rates, it would have the effect of stimulating an economy, and that stimulating the economy really stimulated debt growth and therefore purchasing on debt and it raises. So the economy always has gone through these cycles in which interest rates go up when they're trying to slow the economy, interest rates go down when they're trying to stimulate the economy.

However, when interest rates got close to zero it doesn't work. So you have a lot of debt, debt is rising faster than income, it can't go on forever. Can't lower interest rates, they hit zero, and the world changes. So that's the basic cause/effect dynamic. So in 2006-2007 it was very clear we were in a bubble, but like all of these situations, people at the time very much got carried away with what's happening at the time. Like 2005-06, everybody says -- the stock market goes up -- "It's a great investment," because it went up. They didn't realize it's more expensive. Going up may make it more expensive. But no, they look back and they say, "It's a great investment." Or houses, or, "I can go borrow money and buy houses and do this..." but they don't think about the paying back, and how that works. This is human nature. This has happened through hundreds and thousands of years. So they get to the point where interest rates can't go down, there's not a rectifying of the problem, and you begin a deleveraging and then the process begins to work in reverse.

Can you explain deleveraging?

Ray Dalio: Deleveraging means no longer can you raise income faster -- excuse me -- no longer can you raise your debt faster than your income. So if you can't, you have to slow your debt, you have to slow your spending. So as you slow your spending, you're slowing somebody else's income. It's the purchase of goods, services, and financial assets -- and as you slow the purchases of goods, services and financial assets, the economy goes down and the assets go down. And as the assets go down and the incomes go down, there's more of a need to cut your spending. So it begins to build a self-reinforcing negative cycle. There's not enough money in the system. There's not money in the system because -- again, just think of it -- there's spending, and spending could be paid for either by money or credit. So if you go into a store and you're buying something -- let's say I'm

buying a suit --- I can pay for it either by credit or I can pay by money. If I pay by credit, it's a promise to deliver money. If I pay by money, my transaction is complete, but since I can pay by credit I can stimulate the demand, I can have a strong economy, but I owe money and so the owing of the money means that when I can no longer produce credit, and I have to go get money, I need more money in the system. When you have a zero interest rate, then the central bank is stuck, because this deleveraging will continue to feed on itself. It will continue. I don't spend, you don't earn, it goes down. Can't service my debts because I don't have enough money to service my debts. Banks get in trouble because the person who they lent the money to doesn't pay back.

What is a bank? A bank is a very simple thing. People gather, they put money in a bank, that bank goes and lends to some other people and they then hope to get paid back at a higher interest rate. That's what it is. And so when those people can't pay back, because that credit cycle starts to work in reverse and they can't pay back, then the banks get in trouble. They lose money and when they lose money then they're bad banks and the whole system works -- so you see that at the same time as there is a contraction in credit there was a stock market falling because you need to sell assets, and because of the contraction in credit and people are spending less, earnings of companies go down, so the companies are worth less. And because of then the debt problems, the banks don't do well so we have a banking crisis. So you see that that deleveraging happens in the ways that we're used to happening. The private sector debt doesn't increase, spending is less, banks get in trouble, markets go down, and so on, and there's not enough money. The central bank lowers interest rates, interest rates hit zero, they're stuck. So that's a deleveraging and that's a depression part of a deleveraging. That's the depression part of the deleveraging.

A major deleveraging like the one we've just gone through is a very painful experience. How does it end?

Ray Dalio: That process will continue without interruption. We usually go through a cycle. All deleveragings are the same, pretty much.

Like the early 1980s?

Ray Dalio: Well, but take the '30s, take Japan's deleveraging -- these are iconic deleveragings -- and our deleveraging. At first, austerity is the path, because you realize, "Oh, debt is a problem and what we all have to do is stop getting into more debt." That becomes obvious. We can't continue to do that. So go through the austerity, but as we go through that austerity there's a feedback loop, because that lack of spending, that lack of debt causes somebody else's income to come down. Okay, so then there's a problem because of the debts. So we encounter a lot of defaults, and we think about restricting debts, and those debt defaults mean, "Okay. How do we reenter an agreement in which we can get past that, that you can pay what you can afford?" So there's a debt restructuring, a lot of debt restructuring. But the debt restructurings also don't help because -- well, they help to some extent, but they also bring with them problems, because one man's debts are another man's assets. So if I lower your debt -- let's say I'm going to do restructuring -- you can pay half your mortgage. You come in, we'll readjust your mortgage and you can pay half, then I have to write down that mortgage and so my wealth goes down. And as my wealth goes down, I can borrow less and I can spend less, so it feeds on itself. So the problem is that there is too much debt relative to income. So you can reduce the debt by having austerity and cutting your debt, and that's good, and that's deflationary, and it's negative for growth, because austerity means less spending. And you can restructure, and so that is deflationary and it's negative for growth and so that produces a lot of pain at the same time.

Like in the '30s -- 1929 stock market crash -- and you go through that, and it keeps feeding on itself, and it's not

enough. It's not good enough, because it causes that self re-enforcing process, and then eventually the central banks print money. So in March 1933, which was the bottom of the Great Depression, President Roosevelt severs the link with gold and prints money. Because a debt is a promise to deliver money. So if I can slip a little money into the system, it eases that pressure. The printing of money people think is inflationary, and in and of itself it is inflationary, but if it's happening at the same time as the other deflationary factors are happening --so that there is still austerity, a certain amount. A certain amount of restructuring or working out debts, and the amount of printing, so that they balance, all three of those approaches have the effect of lowering debt relative to income. So you can lower debt relative to income without having a terrible situation but still this takes a long time. They call it the lost decade. These countries go through lost decades. It's usually more than a decade, maybe 15 years. But it's an adjustment process, if done well, in which there's the right mix between austerity -- not raising debt relative to income -- and restructuring, getting the debt payments in order and putting enough money into the system. So you're seeing Europe go through that. It's classic, and all countries and people and companies -- in one way or another -- through history this has happened. The main lesson to learn -- but it's not human nature to -- is not to have debt rise faster than income for an extended period of time, because that's a bubble. That won't last. But because we're so responsive to what we've experienced, we go through these cycles.

Let's say my parents' generation, they went through two decades of depression and war. So they have depression and war and they come out of that with the realization that they don't need luxuries. They want to save to make sure the down side doesn't happen. And of course at that point essentially they're over-saving, and that's -- because there's no debt, you've wiped out the debt -- the cycle is beginning to move up again. Then there is the positive re-enforcement of the cycle. Times become better and you get used to the time becoming better, so you go through the cycle. The '50s, and the '60s, and the '70s, each one of those becomes better, and you become more distant from the negative experience and more confident. More confident meaning that, "What's saving for?" Saving is because you worry that the future will be worse than the past. So you save in order to protect that. So saving becomes less important as your living standards (rise). You say, "I can afford, I can enjoy life more." And then borrowing. Who is doing well then? It's the person who's borrowing to buy financial investments. Or they buy their house, the house goes up, and you look at your neighbors and you say, "That's the thing to do." And then we go through that cycle, and through that cycle debt rises faster than income, and as debt rises faster than income and reaches its limits, then we go through the cycle again. Because these come along once in a lifetime, so we didn't experience them. So once again, it's "another one of those."

So, the big question: What is a hedge fund?

Ray Dalio: I don't know what a hedge fund is. I really don't know. When I say that, it would be like using a term like a "mutual fund." So it's a structure within which investors can do all different things, like a mutual fund. You might say some people are value investors, some people invest in bonds. Some people invest in stocks. People do all different things within a structure called a hedge fund, so it's a particular structure that allows people to do all different things. Basically though, it allows you to invest without much in the way of restrictions, traditional ways. I can sell short as well as go long. If something is going to go down, I can sell short. I can go into any market. I can go into stocks or bonds or commodities or gold, or anywhere that I want to go within my agreement with my client. So it gives me the freedom to approach the world, to look at whatever's good or whatever's bad, and so it's a vehicle that allows me the freedom to invest in the best way that I know how.

Tell us about your decision to start a hedge fund at age 26. We understand you started in your own apartment, is that right? What were you trying to accomplish?

Ray Dalio: It was nothing to do with vision. I think it was probably very much like Steve Jobs in this. We had parallel lives in a sense, because we were contemporaries. I watched him. So I love to trade markets.

I worked at a Wall Street Firm -- two Wall Street Firms -- for about two years. I got out of school in '73. And I had problems fitting into the organization, meaning I literally got in a fist fight with my boss because on New Year's Eve we were drunk together and, it was that kind of... I was not a well-behaved employee, and working within an organization was not the right thing for me.

You literally got into a fist fight with your boss?

Ray Dalio: I was just kind of wild. There are many more things in terms of not being a good employee in that sense.

Like what?

Ray Dalio: You have to shut off the camera if you want to know! It's one of those things I don't necessarily want to memorialize. So it didn't work out and ...

I always loved being independent and at the time clients of Shearson -- it was then Shearson at the time -- had great relationships, they loved it. They loved working with me, and so they were going to pay me, and so then I could then start my business. I didn't view it as starting a business. I just viewed it as, "I get to do what I like to do, which is to play the markets and they'll pay me to do that." And then I did that, and then of course what happens over time is you need things. So I need people to work with, and besides, I love playing the game with people. So I brought in other people, but people would do things, and so I get computers and I get other things over a period of time and it grows, and it became a company. But I never viewed it as a company. I really viewed it more like, "I'm doing this thing, and these are the things that I needed, those people in that group." And then I just kept doing it, and the things I needed became the company.

How long were you in the apartment when you started the fund?

Ray Dalio: Well, I was in that apartment for a couple of years. Then I moved to a brownstone -- a brownstone is a townhouse -- 'cause I needed more space. I lived on the top two floors and worked on the bottom two floors. I did that and I had my family: two children. Then we moved out to Wilton, Connecticut, because I got tired of the city and I wanted to raise my kids on the outside. So then we rented a house and so on. Now we have 1,500 employees.

Where did you get the name Bridgewater?

Ray Dalio: When I graduated from Harvard Business School I was trading commodities, and this was in 1973. This was when it was the oil shock and there was a need for commodities all around the world. I had a bunch of pals who were in different parts of the world, and we decided to put together -- an association, we called it -- that would bridge the waters. What it meant was that I would find commodities that were located in one place and sold soybean oil from the United States to Iran in that kind of an association. And this was one of the things that we did kind of part-time, but it actually didn't end up being... I think we did probably two transactions. It was more of an idea than a reality, and I had the name. So in other words, I had formed the company, incorporated it, and I had the structure. So then when I left Shearson, there it was.

How would you explain, to someone who doesn't know your field, what makes it so exciting to you?

Ray Dalio: I love global macro because it's everywhere in the world, and it's trying to understand how all the parts of the world operate. I love it because it's very, very practical. I like the fact that people are making subjective evaluations of how good I'm doing, but I can measure myself down to two decimal points. What's my performance? It's subjectively evaluated. I like the fact that I can go long or short, so that there's no such thing

as good times or bad times. Most people have an industry or a profession, and they have cycles to them. In my case, I don't have any cycles. I have no excuses, just it's all on me. I can make bad mistakes and that's that reality. I like that. So it's those elements.

You and your firm, Bridgewater Associates, were able to withstand this last downturn very, very well. How is that?

Ray Dalio: Not withstand it. We anticipated and profited by it.

So in 2006 and 2007 we could see that it was coming, because it's "another one of those." And it was a very interesting time because -- I won't name the policy makers -- but the leading policy makers go to Washington and have conversations with them, and it seemed very, very likely that that was going to happen. And as it was happening there was a lack of understanding of it, and the reason that there was a reluctance to embrace this is, first of all, it was controversial, so it seemed improbable, because it never happened before in their lifetimes. Right? And then there was a certain amount of conventional wisdom, and there was not enough discussion, quality discussion. Why might something that seemed so improbable be true? And then the willingness, I think, to think independently, just on the basis of that merit. And yet it was just "another one of those," and if you understand the cause/effect linkage, it had to occur. So we knew -- you don't know anything, it seemed highly likely -- and we then were positioned so that our clients did well in 2008 when most people did terribly. And yet there were no excuses to do terribly really, and there were no excuses for letting that happen, other than they didn't experience it before. Now let me say, that that always happens. It's okay. We all make those mistakes, but the lesson to be learned from that is that you could be wrong, and that you need to understand how the machine works, and you need to look at those probabilities and that these things have happened before.

So for a very, very long time, even after 2008, the understanding of deleveragings was -- not even calling it a deleveraging -- was very controversial, and then understanding the mechanics of deleveraging. Still, people were not paying as much attention to "How does the machine work?" How does the economic machine work? They were thinking their opinion about what's going to come next. So let's take the issue of deficits, of government debt, of austerity, of printing of money. These are still very controversial subjects. Most of the people who have opinions about those subjects are not actually studying how the machine works -- going back in history and saying, "What are those cause/effect relationships?" -- but they have opinions. Now we should instead be having a conversation on -- just like biology or physiology -- "What is the cause/effect relationship? Let's agree. Let's put that model through time." I've written my views on how the economic machine works. I created a web site -- I'm not sure of the web site -- I think it's called howtheeconomicmachineworks.org or something. But in other words, to just put out, "What do I think the machine looks like?" We should be talking about that, and then move on to the question of what we should do. Right. But there's not enough of that. There's not going to the higher level and saying, "How does that machine work?"

That idea of seeking the underlying cause and effect relationships ties into your idea of radical transparency in management. They're both about truth.

Ray Dalio: Right. Reality is reality.

You've had phenomenal success in the financial world. Did you anticipate with your strategy that you would be this successful financially?

Ray Dalio: No, and nor was it ever my goal. Nor do I particularly think it's my reward.

What is your reward?

Ray Dalio: The personal experience. The personal evolution. I think it's that. It's that process of, you know, would Einstein have said, let's say that -- I don't know, whatever -- he receives a Nobel Prize or something, and would he say that was his reward? He wouldn't say that was his reward, or the equivalent. It's the experience of the discovery, the excitement and then evolving. So you evolve to more and more levels of difficulty. It's like learning how to ski, I guess. You ski at one level, and then all of a sudden -- I've skied for 50 years, 15 hours a day or 14 hours a day. I got better at skiing, and so what's the kick? The kick is then to ski where you keep yourself still at the edge, and to do that, that's the kick, the evolution.

We want to talk about your idea of radical transparency. This is a hallmark of your principles for doing business. Does that mean that the people who work for you have to be willing to see themselves as they are?

Ray Dalio: Everybody has a responsibility -- the right and responsibility -- to make sense of things. In other words, it's got to make sense to you, and if something doesn't make sense to you, you should bring it up. You shouldn't talk behind somebody's back or gossip. Too many people talk about the other people, what they're doing wrong. Except they don't talk to those people about what they're doing wrong. So they don't know whether they're actually doing them wrong or not. They haven't heard the other side and they're not being productive. So that's terrible. Also, the organizations, for me, in which arbitrary decisions are made are terrible. You know, a boss, two bosses, will get together and they'll have a conversation of what a particular person is like and then call the person into the room and then they'll say, "Aw, Harry..." And then they'll give them spin. Spin is terrible. It undermines trust. So we have a policy of taping everything and letting everybody watch it and look at it, and then having thoughtful conversations about that. If you're coming into the company, you go there because you believe that understanding what is true and -- not radical transparency -- to understand what's true and have thoughtful conversation "about him," including harsh realities is healthy.

It's the embracing of reality. "What is the reality?" including, "What mistakes?" and "What weaknesses?" so that I can learn from those mistakes, or learn how to deal with those weaknesses, in order to be successful. So yes. That's embedded, those are the ground rules. You know the ground rules. That's how to have an "idea meritocracy." In other words, if you want to have a real idea meritocracy that doesn't have any barriers to it, we'll go wherever truth leads us. That's what we do, and that's very powerful. That's where the success comes from. We've had radical success, and that's where it's come from, because it also allows independent thinking. Right? I need independent thinking, because if you're going to make a position in the markets, it can't be with the consensus, and you don't know if you're going to be right or wrong. So you have to test it. It's very powerful, and it's also so silly not to do that, because of these ego barriers. Why wouldn't you have those conversations? It's not logical not to.

That could be painful for people if their feelings are hurt easily. I don't know if they need a thick skin, but it sounds like they have to be willing to feel some pain.

Ray Dalio: The interesting thing about it is that it redefines what's painful.

Unfortunately, we have most people, and they have not been raised with the notion that knowing what you're weaknesses are is pleasurable. Also, the issue of pain is associated with "bad" and pleasure is associated with "good" and that's not true. That most of all growth -- you can't get stronger physically and mentally unless you're having pain, because you're stretching yourself, you're going into a new level. So pain is good if you're exercising, right? Go exercise at the gym. It starts off painful, but as you start to get going with it, and you start to see the benefits of it, and you start to change actually your brain physiology in terms of what actually determines whether it's painful or not, it becomes pleasurable. So behavioral modification usually takes place

over about 18 months of doing something. So you start to get into an environment where it's pleasurable. And in our case we call it getting to the other side. People come in and they originally -- they look at this and say, "I made a mistake. I feel pain about that," or "I'm identifying some weakness and I feel pain about that." And then, after doing it enough and seeing the feedback, then they begin to realize that it's producing benefits to them, and they begin to like it, and they begin to worry about being in an environment that they won't have that.

That if they go into a normal environment they're going to have dishonesty. They're going to have people seeing the same things, thinking the same things about them, but not telling them. They won't have an opportunity to have a discussion. They won't know whether it's truthful or not. It will all be under the covers. So they're fearful that they won't actually know either what their mistakes are, or people will be making judgments without being able to have a quality conversation. So that's the choice. Which environment would you rather be in? You have to decide for yourself. Which environment would you rather be in? That you know that there's going to be conversations about what people think about you? An honest exploration of whether that's true or not? You can avoid all that.

We know you practice transcendental meditation. How did that practice come into your life?

Ray Dalio: In 1968 the Beatles went to India to learn how to meditate and I heard quite a bit about it. It was in the media. It was interesting and then I tried it. I learned how to meditate and it was definitely life-changing. I would say that probably had a bigger effect on my life than practically anything, because of how it works. It's basically open-mindedness. I could explain how it works.

Please do.

Ray Dalio: Normally, you can't control your brain. If you were to sit down and say, "I'm not going to think," it will be filled with stuff, and it will jump all over and you can't control it. So what happens is, this is an exercise that creates open-mindedness. There's a word that doesn't make sense, which is called a mantra. It's a sound that you repeat. So while your brain is wanting to jump all over the place, by repeating this sound mentally, it takes your attention away from those thoughts. And when you continue to repeat it, it goes away, and so there's nothing. So you go into nothingness. Now when you go into that nothingness, first of all you've learned the ability to control your brain so that you can go there. You can put things away, you can approach them in a certain way. When you go into that open-mindedness, you're going to your subconscious. So you're not a state of conscious, so I'm not aware, but I'm not asleep. Asleep is you hear a sound you won't wake up. This is, if I hear the slightest sound, I'm attuned to it. So it's a state of sub-consciousness.

There are different parts of our brain that have a very big influence on us. The amygdala is the part of the brain that has the "fight or flight" that produces anxiety. The pre-frontal cortex is the part of the brain which we call "for executive functioning," where it's the part that's reflective. It's the part that we are calm, and we say, "Do we want to do that? Do we not want to do that?" We put things in perspective. Those two parts of the brain fight with each other. In other words, the passion: "I'm going to do that because it's exciting but it may be harmful." The other part of the brain says, "You don't want to do that." So that whole emotional fight-or-flight part of the brain during meditation, through brain imaging they see that that calms down, and the pre-frontal cortex lights up. So that open-mindedness creates where creativity comes from. Because creativity is not coming from the "working the brain" and the "I will work hard and think about it" and that "I will muscle it through." It comes from this relaxation. It's an opening up, and take a hot shower and don't be thinking of something and some great idea comes through and you grab the great idea. So meditation is very much like that. It opens the mind. It creates an openness, a freedom, in which -- I don't know whether we would say "an intuition" -- that creativity

just kind of comes through and it creates an equanimity. In other words, you could step back and you can put things in perspective. It doesn't lessen your emotions. The emotions are the same, but you can step back and say, "I'm not going to be controlled by that emotion," or "Let me put things..." and I think it then helps to see things at a higher level.

It sounds like creativity is very much a part of your work, because you have to see what others can't see.

Ray Dalio: It's what I do, I love being creative. I go there and I encounter... The market is just a medium, it's just my instrument. It's a vehicle. In many ways, I've invented many different investment concepts that have never been invented before, because they just made sense. So it's not just the making the money, and the game as it's structured. It's inventing how the game should be played. That's fun, that's interesting. It's just a natural extension of that. So that's my instrument. The markets are my instrument. Somebody else might have -- medicine might be somebody else's instrument. Computer technology is somebody else's medium.

Do you relate to the idea of a muse, or a sprit of creativity, or inspiration?

Ray Dalio: Oh, yeah. If I totally relax, it's almost like it passes through me and goes to the hand -- the equivalent.

So there's an analogy with other kinds of creative work.



It happens the same way in all of these cases. It's the interaction between that happening, and working yourself back to reality. So Steve Jobs, Einstein, they did the same thing. It's the same process when we were talking about shapers. It's the same process, because you're going from the one side of your brain -- from right brain to left brain. You're navigating from concept to imagination to actualization. It brings you from the big picture to the small. Down to detail, with reality, embracing that reality. So you have that imagination, but then you go back to the data. Does it make sense? Do the two connect? So it's a

back-and-forth exercise. That's how it works.

Is that maybe what sets "shapers" like Jobs or Einstein apart?

Ray Dalio: They all have a passion, a determination. They will drag themselves through anything basically, because they just have a need to do that. They learn by making mistakes. Mistakes are part of the process. They have a love for ambiguity, not a fear of ambiguity. In other words some people love to go into the unknown. Some people hate the unknown. And it's that constant process that they're pursuing. They can go from the very conceptual to the very granular. So that they will be very granular and then come back to the conceptual, and they operate in that way, back and forth.

That's what we try to do with the Academy web site: identify the elements of success and achievement that can be applied in any field.

Ray Dalio: What's interesting about your web site is that it's the closest to being able to see these things. In other words, "What do they value?" You could probably organize it. You can go through the web site, if you were to

tag it, "What did they value most?" I'll bet you that they valued most the things that we're talking about. In other words, reality, looking at reality. Appreciate the beauty of reality, the understanding of reality, a passionate desire to understand how it works. The determination, then the shaping, the desire to affect it. So if you categorized, went through the interviews, tagged them, you probably could say, "What did they value, and then how did they go about it?" What was necessary? For example, people who are running a group of people, you could distinguish between them. People who are running a group of people, like Steve Jobs was running a group of people. Some people can do it in a lab and not run a group of people. Einstein did not have to run a group of people. So he would do it his way. Let's say General Powell. If you take General Powell, he had to run a group of people. Now how did he run a group of people? The people who ran a group of people would not let people stand in the way of their goals. They were a certain way with people. They were tough. They would recognize people's strengths and weaknesses and deal with those strengths and weaknesses. Unlike a lot of people who would be worried about offending people, they wouldn't let offending people or cutting through it stand in the way of getting to the goal.



That certainly sounds like Steve Jobs.

Ray Dalio: Steve Jobs is a great example of that. Right? We're talking about the elements that are required to achieve a goal. You'd like to have Steve just describe what was required. If you're running a lot of people and you have to accomplish something, you have to cut through the people to get to the goal. That's not cruel. I can't speak for him, but I wouldn't view that as cruel, I would view that as helpful. I think that these are the important things that your web site will do, is to extract that. The interesting thing about it is to depersonalize it to some extent. While personalizing it is interesting to the extent where you can take themes out of it. Extract the themes within that and you have the ability to understand what works. So when I look at these tests that we get, we see that the different types of people in the test have a personality like, "Just go!" It follows certain patterns that are different from everyone else.



These principles of leadership you talk about can be applied to any field, but you apply them to business strategy. When you talk about your business you make it sound incredibly exciting.

Ray Dalio: Oh, it is. It is. It's a thrill, because I can go anywhere in the world -- anything. I just have to bet on how reality will transpire, so I have to know how the machine works. It's just my machine. Right. I was enjoying some of the people I was with yesterday. I had conversations with two Nobel Prize winners in physics. I'm also dealing with brain physiology. I had conversations with these people and it's unbelievable. Because it's all

connected and we just have our mediums, but the interest is above the medium. It's a broader base, it's not just narrow. Einstein was a musician, and he loved philosophy, he loved art. Because beauty, it's loving how reality works. Right. It's just a different way of plugging into it.



Keats said, "Beauty is truth, truth beauty."

Ray Dalio: It is for me. Nature is very big for me, because man is just one of 30 million species, so there are 30 million approaches. Okay, man is preoccupied with man.

Most of the world doesn't have people on it. You get in a plane, we're crowded in a particular location. You go up in the air and land someplace else where there are people. Most of the world isn't like that. It's like being an ant in an ant hill. But the laws of the universe apply to everything. So if you really want to understand in that broader sense, you're attracted to it all. So to speak to physicists who are talking about the universe and to listen to how that works! And at the same time evolution. Man is a relatively new species, only 200,000 years old. Those laws of the universe are the same for all of us.

We've asked many of our interviewees about the concept of the American Dream. You've certainly realized many people's visions of the American Dream. Does that phrase speak to you at all?

Ray Dalio: I have mixed feelings of the American Dream. I'll tell you what I love about the American Dream. This is a country of -- I think it's defined mostly as a country of immigrants, of people who have come with all different points of view, and all different perspectives, and that they had to get along. There had to be an acceptance at least -- in many cases an appreciation for -- all of those different points of view. It was a land of opportunity. It should be an opportunity. That is fantastic. A meritocracy, to be all you can be. That is the American Dream and I love that element. At the same time, I don't want to stamp it as American. It is what is uniquely American, I think. But it can be, in various ways, anywhere, and wherever it is, it's good. Now we're in a global world, and it's very important in that global world that we emphasize, most importantly, good ways of being. Not overdo the Americanism part, relative to the "What is the good way of being?" and then understand, also, other good ways of being. Those dimensions, to me, are -- absolutely I love. And then we also can bring in elements of, let's not be so emphasizing the American part of it that we also say, "It's got to have an American stamp on it to be good" that we can't then also say, "What are all the different other ways of being in the world that we also can learn from?"

A little while ago we heard from a speaker at the Academy who said, for much of the world, the dream of success is "the Chinese Dream."

Ray Dalio: What is in common with the Chinese Dream and the American Dream? Do you know what? So then they become some of the universal rules. So the Confucian notions of certain -- saving! -- it looks like a Horatio Alger. In many ways the Confucian values are similar to the Protestant work ethic. So what are you trying to achieve? So what is -- when we say, "the Chinese Dream," if you go beneath the surface, just like I've said, there are elements of the American Dream. It's the meritocracy, it's all of that. When you deal in China, what they want is in many cases what we want. They want their families to be well educated. They want to progress, they want similar things. And then there may be differences too, and how do they go about that? Basically, for the most part, most people want similar things, not identical. I mean you could break the world, I think, into -- I would say different sort of categories -- to make a big difference rather than put names: "China." We are more similar to China in many ways -- China and us -- in that there's a desire to, in the Americas, in the United States

or in China, there's a desire to accomplish. Or to change the world or to evolve and to raise your living standards and all of that.

In a large part of the world, there is a desire also to operate in harmony with life, to savor life. So if you were to go to a Palestinian, let's say, and an Israeli, they might have differences in what they think is important. It might be very fundamental differences. One might think accomplishing something is very important. Another one might say, "No. It's the relationships of sitting down and having a cup of coffee, or a cup of tea," and the quality of that experience. So different people are going after different things. Some people are going after spiritualism, maybe totally different spiritualism. I mean, I think in the West we generally don't even understand very well what spiritualism is, because we associate it with the Judeo-Christian notion of religion, but spiritualism is something very different than that. But you'll have groups of people who will go after spiritualism, and then other groups of people who will go after accomplishment. It's the difference between the cities -- New York, Boston, Washington, L.A., San Francisco -- they're going after different things than they are in other parts of the country, where it's the savoring. So are you trying to savor? So when we look at those things, to stamp them "American," or "What is Spanish?" It's an oversimplification of certain values I think.

It sounds like you put a lot of stock in being open-minded in your approach to the world.

Ray Dalio: Oh, yeah. Yes, yes, yes. It's the most important thing. First of all, it's fun, and it's enlightening.

Well, thank you so much for your time and for the stimulating conversation.

Ray Dalio: It's a pleasure. I'm excited about the web site. I can't wait to dive in.

Thank you.

This page last revised on Sep 05, 2013 19:26 EDT