

WALTER ISAACSON REFLECTS ON THE LIFE OF CREATIVITY OF STEVE JOBS

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Excerpts from Mr. Isaacson's Remarks

Smartest People You Have Written About: What really matters is whether you're imaginative – or creative. Obviously the person who was both the smartest and the most imaginative was Einstein. But it was not conventional smarts that made Einstein what he was. In fact, in 1905, when he transformed the entire world of physics with the two great pillars that now stand in physics – relativity theory and quantum theory – he was a third-class patent clerk at the Bern, Switzerland, patent office, because he couldn't get a job or even a doctorate at Zurich Polytech.

Steve Jobs: Steve Jobs in some ways was the least conventionally smart. When he came back from India and was 19 or 20 years old – he kind of dropped out, sought personal enlightenment in India – he said, I learned the limits of rational Western thinking and took up what I learned in the villages of India, which was intuition and intuitive thinking.

So if you were to look at what's classic smarts, you would generally say, western rational thinking, the way a Bill Gates can massively process a large amount of data and ideas and come up with an answer. For Steve Jobs, it was much more intuitive.

Two Sides to Steve Jobs: There are two sides of Steve Jobs that always, eventually, intersect – the kind of counterculture, nontraditional, New Age, rules don't apply to me guy, who goes to India and learns intuition, and then the engineering, business, very focused, pragmatic side. And whether it's his personal life, or the products he makes, or his cancer treatment, you have both of those strands happening.

Steve Jobs' Personality: He had an unbelievably complex personality, both intensely focused and charming at times, but also intensely depressed, mad, angry, or difficult at times. He kind of shunned psychiatry and psychiatric drugs. He said it will keep you from being who you are, which is why I've never done that. Now, I'm not advocating that..

Creativity and Technology: The theme of the book is how to be at the intersection of creativity and technology, art and sciences. Every product demonstration he did ended with a slide of this intersection of a street called the humanities and the street called the sciences. He said that's what Edwin Land at Polaroid taught me: I want to stand at that intersection, and I want Apple to stand there, too.

Steve Jobs Not Driven by Money: He said, I was incredibly poor and penniless, wandering around India with not enough money to buy even rice, and then I was incredibly rich – hundreds of millions – a few years later. So I've never had money be much of a driving force. So he

worked for a dollar a year, but he always insisted on repricing stock options and other things. So it was a complex relationship to money. But in the end, Steve never got driven by money.

DAVID RUBENSTEIN: Welcome to our sixth event of the 25th year of The Economic Club of Washington here at The Renaissance Downtown Hotel in Washington, DC .Our special guest today is Walter Isaacson, president and CEO of the Aspen Institute.

Walter has a distinguished background, currently as the biographer of Steve Jobs. Walter is a native of New Orleans, graduated from Newman High School – which was also made famous by Eli Manning, having graduated from there – is that right?

WALTER ISAACSON: Peyton. [Chuckles.]

MR. RUBENSTEIN: And Peyton Manning, too. He went to Harvard College, was a member of the *Lampoon* there and won a Rhodes Scholarship. From there he went to Oxford, got a degree; came back, and became a part-time journalist initially at the New Orleans Times-Picayune, which is his hometown newspaper. In 1978, he joined *Time Magazine* and in 1996 rose up to be the 14th editor-in-chief of that publication.

He was employed there for a number of years when, in 2001, Walter became the president and CEO of CNN. In 2003 he was recruited to be the president and CEO of the Aspen Institute, dramatically reinvigorating and doing an extraordinary job there. I've been to a number of their programs, and they're quite remarkable. Walter deserves a great deal of credit for what he's done.

Although he's also a full-time person running Aspen, he has a number of other things he's done on the side. Among them are: He's on the board of Tulane University from his hometown; A member of the Harvard Board of Overseers; a member of the Bloomberg Family Foundation; a member of the United Airlines board. Also, in his spare time, he writes books. He has now written biographies of Henry Kissinger, Benjamin Franklin, Albert Einstein, and Steve Jobs. And this is in the daytime, I guess before he goes to work.

But let me ask you, of the four extraordinary individuals you've written about, who was the smartest? [Laughter.]

MR ISAACSON: [Chuckles.] Well, first of all, you know a lot of smart people, and this room is filled with smart people. And you realize that smart people are a dime a dozen, and they don't usually amount to much. [Laughter.] What really matters is whether you're imaginative – or creative.

Obviously the person who was both the smartest and the most imaginative was Einstein. But it was not conventional smarts that made Einstein what he was. In fact, in 1905, when he transformed the entire world of physics with the two great pillars that now stand in physics – relativity theory and quantum theory – he was a third-class patent clerk at the Bern, Switzerland, patent office, because he couldn't get a job or even a doctorate at Zurich Polytech.

So he was not conventionally smart, but unlike every other brilliant physicist of the time who was trying to figure out, why is the speed of light constant, or the patent clerk, who was trying to synchronize clocks, Einstein said, maybe it's because time is relative depending on your state of motion. It was an imaginative leap, not a smart leap, that did it.

Steve Jobs in some ways was the least conventionally smart. When he came back from India and was 19 or 20 years old – he kind of dropped out, sought personal enlightenment in India – he said, I learned the limits of rational Western thinking and took up what I learned in the villages of India, which was intuition and intuitive thinking.

So if you were to look at what's classic smarts, you would generally say, western rational thinking, the way a Bill Gates can massively process a large amount of data and ideas and come up with an answer. For Steve Jobs, it was much more intuitive.

MR. RUBENSTEIN: Well, if you had a chance to have dinner with any one of those four people for 2 hours, or recommend anybody here, who would be the most interesting dinner companion?

MR. ISAACSON: Well, 2 hours makes it different from 1 hour. You know, after an hour of Einstein, I'd be so intimidated.–I'm going to leave Dr. Kissinger aside, because half of the people in this room have probably had dinner with him, and he's a delightful, charming dinner partner.

Clearly Ben Franklin is the person you most want to spend more than an hour with – somebody convivial, nice, interested in a hundred different fields. You know, people said, gee, Steve Jobs seemed – besides being so ingenious and everything else – so difficult at times. And there were times he was. I said, if you want nice, buy Ben Franklin. He was nice.

MR. RUBENSTEIN: Is it easier to write a book about somebody who's deceased or somebody who's alive?

MR. ISAACSON: Well, after I wrote the book on Dr. Kissinger, I got I think 6 or 7 letters from him in a day-and-a-half period that were hand delivered [laughter] by Paul "Jerry" Bremer, who was then working for Kissinger, Every one began: It is absolutely outrageous that you would say I had anything less than high regard for Gerald Ford's intelligence [laughter].

And so for about 6 months he didn't speak to me. Henry Grunwald, whom you may know, who was my boss then at *Time, Inc.*, was a friend of Kissinger's. Dr. Kissinger expressed annoyance to Grunwald, who said, well, I thought Walter's book was fair and straight down the middle about you. And Dr. Kissinger said, as a joke, I think, What right does that young man have to be fair and straight down the middle about a person like me? [Laughter.]

So I swore after that, I would not write about anybody who had been alive for at least half a century, because I didn't want to deal with them again. I think I'm about to make the same vow, having dealt with Steve Jobs, too.

MR. RUBENSTEIN: Well, now, you're minding your own business, you're running the Aspen Institute, and all of a sudden Steve Jobs says, can you write a book about me? How did that come about?

MR. ISAACSON: What happened was, in the summer of 2004 I got a call from Steve Jobs. I had known him intermittently since 1984, when he came as a young hotshot to show off the new Macintosh, the Macintosh One. And even then, in the conference room of *Time Magazine* – as he demonstrated this new Apple computer – you could see both sides of Steve Jobs.

He was passionate for the perfection of that product and showed exactly how the curves on and the bevels in each one of the industrial designs, each icon, the graphical were seamless. You know, he was just going nuts about how great it was. But he was also furious at *Time Magazine* for not making him Man-of-the-Year the year before, which he thought he was going to be, and because Michael Moritz, who was then working at *Time Magazine*, had written a piece about him that wasn't up to what Steve wanted.

So I thought, well, this guy is totally mesmerizing. I came away kind of liking him. So over the years, we'd sort of be in touch now and then. So he called me in 2004 and said, why not do a biography of me? And I'm thinking, all right — Benjamin Franklin, Albert Einstein— you know. Well, that's a little like a —

MR. RUBENSTEIN: — leap of faith.

MR. ISAACSON: [Laughter.] So I said, yeah, maybe in 20, 30 years when you retire. You know, I was putting it off. And finally he came back to me. Somebody in his family said, if you're going to do Steve, you have to do him now.

MR. RUBENSTEIN: How do you actually write a book when you have a full time job? I mean, how do you have time to go out? You interviewed him forty times. You had hundreds of other interviews. How do you actually, physically do that? And when do you actually write — do the writing?

MR. ISAACSON: Well, definitely not what you said — I don't write in the morning. And daytime isn't my favorite time. I don't watch TV really; especially having recovered from CNN, I don't watch TV in the evening. [Laughter.] And you know my wife, Cathy, she's a morning person. So she loves to be, sort of, in bed reading by 9 p.m. I'm a night person, and I try every night to write between 9 p.m. and 1 or 2 a.m.

MR. RUBENSTEIN: Do you do the research first, and then write after all the research is done? Or do you write differently?

MR. ISAACSON: Oh, I would do about 80% of the research, and then as you're writing, you say, oh man, I need this. Or, in the case of somebody like Steve, who was still alive, you know, events would continue to happen. But I'd try to take all the research, all the interviews, and have a pretty simple method. I have one huge searchable Word document, and just put everything chronologically, so I can figure out where it is.

MR. RUBENSTEIN: And Steve never said, I'd like to see what you're doing?

MR. ISAACSON: No. At the very beginning, I thought, if you had to say seven adjectives about this guy, one of them would be control-freakiness. And so I thought, all right, this is going to be bad, because he's going to want to control. But he said, I know I want this to be an independent book. In fact, I want it to feel like not an in-house book. I will not even read it before you submit it, because I don't want to. I'll take no control over it.

Even in my – I think it was my last – meeting with him, he was very, very ill. He said to me, there’ll be parts of this book I don’t like. It was more a question than anything else. He said, well don’t worry, I don’t want to get mad at you. I wanted this to be independent book. So I won’t read it for at least another year, or another 6 months.

He had such a way of magical thinking – his ability to have a sort of, almost reality-distortion field. I said to myself, oh, that’s great. It means he will be alive in another year or so. But of course he wasn’t.

MR. RUBENSTEIN: But he couldn’t completely control himself, because he didn’t like the picture on the cover, so –

MR. ISAACSON: – so Simon & Schuster put in the catalog – about a year and a half ago – a cover design just as a placeholder, which had Jobs and a little Apple, you know, and it was kind of gimmicky. I think it said iSteve. I arrived – and you can date it by the fact that I think it was the launch of the original iPad – and I flew into San Francisco. I was supposed to meet with Steve beforehand, then be with him for the launch, and spend a few days with him afterward. I got to the San Francisco airport, landed, and the worst thing you ever want to see on your iPhone, if you’re me, seven missed phone calls from Steve Jobs! [Laughter.]

Now Steve never calls you back unless he *really* wants to. So I knew – not good. I’m standing in the United Airlines concourse there, and he just starts. It was the only time I’d seen the really brutal side of his temper. He said, “That is the ugliest cover! You have absolutely no taste, clearly. I don’t ever want to see you or deal with you again, because it sucks. Then he used words that rhyme with sucks, but – [laughter] – I won’t say here.

I’m holding the phone out, and I say, oh God. Finally he says, “I don’t ever want to ever talk to you again, unless you allow me to have some input and say on the cover design.” I’m no fool. This took me about three-quarters of a second – [laughter] – to say yes. I mean, here’s the greatest industrial-design and graphics-design eye of our generation, and what he wants is a cover. And I tell you, it was near the end of his life, and it went on, dragged on, for a year or so afterwards, and Steve was quite sick.

We spent a lot of time going back and forth. This is the Albert Watson picture that I’d always wanted, taken for *Fortune Magazine* in 2009; Helvetica type, which he insisted on, had graphic designers do it. Then just the original Mac I was talking about, Norman Seeff did this for Rolling Stone. But it is a pure, simple Apple design. I said great, cool.

MR. RUBENSTEIN: You mentioned a word, in answering a question, called reality- distortion field. And frequently in the book, you say that one of Steve’s successes or one of his problems was that he always distorted reality.

MR. ISAACSON: Correct.

MR. RUBENSTEIN: Could you explain what you meant by that phrase?

MR. ISAACSON: It started with [Stephen] Wozniak, his partner – before they were even partners. They had to do a game at Atari. And Steve wanted Woz to help him create a new game that was called Breakout. Those of you who are old enough – in fact, every one of you –

[laughter] – seem old enough to remember the game Pong. You know, where you hit a ball to the brick wall. Breakout was sort of like Pong, where you hit the ball back and forth, but this was a one-person game.

And Steve says, we have to do this in 4 days. Woz says, you cannot do this in 4 days. This is going to take about a month to do. Steve said, you can do it. You can do it in 4 days. And Woz said, that was the whole reality-distortion field. He would make you believe something impossible. But the key to understanding it is, then you did it. You were able to do the impossible because he told you that you could.

It worked over and over again. You probably know quite well one of the great industrial CEOs of our time, Wendell Weeks, who runs Corning Glass. About 3 or more years ago, Steve doesn't want the iPhone in plastic. He wants a glass front, and he wants it to be really tough. He thought of going to China where they're making the big glass plates of the Apple store, but he didn't go

Finally somebody said, Corning might be able to do it. So Steve flies to Corning, New York. He sits there with Wendell Weeks and says, I want you to make a type of glass that would be so strong, boom-boom-boom-boom. Wendell Weeks finally says, well, we had something called Gorilla Glass that we never manufactured. He starts to show it and Steve says, no-no-no, that's not how you do it. Wendell Weeks is pretty tough. He says, no-no-no. I know how to make glass. Shut up and listen. [Laughter.]

So Jobs actually gets kind of impressed, shuts up and listens to the process for making Gorilla Glass. Steve says, great. The phone's coming out in September; I need this quantity by July. Wendell Weeks says, no-no. We cannot do that. We actually have never made it before. We don't have a factory making it – [laughter] – but it was a process we did once, and we think we can do it again. Probably it'll take a year or two.

So Steve says, don't be afraid. You can do it. Same thing he had said 25 years earlier to Woz. Wendell Week said, I'm staring at this guy, you know, thinking he's nuts. And then Wendell said, I called our factory in Kentucky that was making windshields and stuff, and said, I want you to convert tomorrow to making Gorilla Glass.

Now every piece of glass on every iPhone, iPad, and iPod is made by Corning, because he was able to convert it that night and had it out by July. That's the good side of the reality-distortion field. We can go into the bad side as well, which is, you know, he didn't believe rules applied to him, and even when he's diagnosed with cancer, he thinks he can reality-distort it.

MR. RUBENSTEIN: Well, for example, when he was diagnosed with cancer, you point out in the book that he spent 9 months thinking that diet might solve the cancer problem. And after 9 months he finally realizes, maybe diet won't work. Could you go through why he just –

MR. ISAACSON: Well, there are two sides of Steve Jobs that always, eventually, intersect – the kind of counterculture, nontraditional, New Age, rules don't apply to me guy, who goes to India and learns intuition, and then the engineering, business, very focused, pragmatic side. And whether it's his personal life, or the products he makes, or his cancer treatment, you have both of those strands happening.

It takes a while, because he's looking for alternative treatments. But as I say in the book – it didn't get quite as much pickup – he is also doing the most cutting-edge traditional medicine. He's having his genome totally sequenced, and his whole DNA sequenced – sequencing the

cancer, trying to find out targeted drugs that could work. So the problem is it took a few months longer than it should have, as he's doing both.

MR. RUBENSTEIN: But do you believe today, or does his family believe, or did he ever think that had he gotten the treatment right away – as soon as he had heard he had a tumor – and gotten the treatment and had the operation, he would be alive today?

MR. ISAACSON: You just don't know. He doesn't know, his doctors don't know. It could have metastasized at any point. It was a pancreatic cancer. There were people – Art Levinson, who was on his board, who was CEO of Genentech and others, who were pushing him. You've got to do this; there's a way to fight. And he does do it. And clearly, even the greatest scientists in the world wouldn't know. I'd not venture a guess now.

MR. RUBENSTEIN: Now, in your book, you don't really go through a lot of the psychiatric situation, I guess. I'm not a doctor, but it would seem like he was a classic bipolar, manic-depressive person – very effusive, very high-energy, and then at times, he's depressed and yelling at people. And he never thought he had that problem, or nobody ever addressed that?

MR. ISAACSON: Well, as I say, I'm not an armchair psychiatrist. One of the most common letters I get from people who've read my book, people say, you know, I know a lot about psychology, and his problem was – you know, ADD or whatever it may be. I don't do that.

He had an unbelievably complex personality, both intensely focused and charming at times, but also intensely depressed, mad, angry, you know, or difficult at times. He kind of shunned psychiatry and psychiatric drugs. He said it will keep you from being who you are, which is why I've never done that. Now, I'm not advocating that.

MR. RUBENSTEIN: One of the strands of his personality you write about in the book is that he was adopted, and he was given up for adoption by his biological parents. It's a very interesting story how he tried to meet his biological mother at one point, and then didn't really want to meet his biological father. Can you describe that briefly?

MR. ISAACSON: I think one of the keys to understanding Steve Jobs is his feeling that rules didn't apply to him; he was special, and a misfit. He didn't fit in. If you look at any Apple ads – here's to the rebels, here's to the misfits, those who think different, that sort of thing. We talked about it on a walk through his own neighborhood. When he was 4 or 5 years old, and he knew he was adopted – he didn't quite know what it meant, because his parents, Paul and Clara Jobs, who had adopted him, had always been honest with him – and the girl across the street says, oh, you were adopted. That means your real parents abandoned you and didn't want you.

He says, I ran across the street, went into the house, and both my parents – his adoptive, Paul and Clara Jobs – say to him, no, no, you don't get it. We specifically picked you out. You are special; you are chosen. And so he said, I always felt special and chosen. But also, there's that abandoned thing.

So in his twenties, after he's moderately successful and Apple has started, he really admits he's always been on a journey – he decided to find out who his birth mother was, and couldn't. Hired a detective, couldn't work out. And finally, he looks on his birth certificate and

there's the name of a doctor in San Francisco. He calls the doctor in San Francisco; the doctor says, I'm sorry, all of our records were destroyed in a fire. I can't tell you who your adoptive mother was.

That was actually not true. That night, that doctor sat down and wrote a letter saying, to be delivered to Steve Jobs upon my death – because he didn't want to break his, whatever, secrecy, but I guess he felt that after his death – and there's about a hundred coincidences that are really weird, it seems like, but the doctor dies, like, real soon. Like, a few days later. [Laughter.]

So the letter shows up, and Steve finds his mother, his biological mother, Joanne Simpson, who is living in Los Angeles at the time. His biological father had been from Homs, Syria, which is the hotbed of the revolution now. In fact, you'll see some names – if you read about what's happening in Homs – of the Jandali family, J-A-N-D-A-L-I. That's his family.

His father was Abdul Fattah Jandali, like, the ninth son of this very prominent family in Homs – but abandoned him. So he tracks down the mother, Joanne Simpson, who starts crying and saying, I'm really sorry. He says, no, no. And she says, by the way, I have to call your sister. You have a sister – you know, meaning Jandali and her. And we didn't put her up for adoption, and I raised her.

And she calls the sister, who turns out to be Mona Simpson, the great novelist, who then is not quite a great novelist – working at the Paris Review, George Plimpton's place in Manhattan – calls up, and being Joanne Simpson – if you ever read Mona's novel, which is called "Anywhere But Here," it's about how wacky Joanne Simpson here – says, you have a brother. And she says, who? And she says, I'm going to tell you who he is. I'm going to bring him to you. I'll just give you – I'll just tell you this: He was very, very poor. Now he's really, really rich and famous, and has dark hair and is good-looking.

So the entire Paris Review staff in the East Fifties decide to make a guessing game in the 2 or 3 days they're waiting – who is Mona's brother? And they finally decide it's John Travolta. [Laughter.] Steve Jobs appears; he and Mona bond like this. I'm sorry, this is long. I'll speed it up. They decide, especially Mona, let's find the lost father. That's the name of the book she even writes about it, "The Lost Father" – track him down, whatever.

Finally, Mona, with the help of detectives, tracks him down, and he's running a coffee/diner restaurant in Sacramento, California. Mona flies out to California, says to Steve, let's go meet the dad. Steve says, I don't want to, but I'll meet you afterwards at this coffee shop/café, Roma, and you can tell me about it.

To make matters even more complex, for those who like coincidences – or Freud or Shakespeare – Steve has had an illegitimate daughter when he was the exact same age as his father was, and had pretty much, at first, abandoned this illegitimate daughter, named Lisa. But then they had gotten back together. Lisa was then – you know, he was taking responsibility for her. So he brings his illegitimate daughter, Lisa, to this meeting.

Mona goes to meet Jandali, running this coffee shop, and he, of course, starts crying, as everybody does in this book, and says, I wish you could have seen me in my heyday. I ran some really great restaurants. I even had a restaurant, you know, near Cupertino that was the biggest restaurant in Silicon Valley. It was a great Mediterranean restaurant. Everybody used to eat there, even Steve Jobs.

So Mona bites her tongue and doesn't say, Steve Jobs is your son – because she had sworn to secrecy. But she looks surprised, so Jandali says, yeah, he was a good tipper. So

anyway, Mona then goes, meets Steve later that day, tells the whole story. And Steve says, that fat, balding Syrian guy was my father? [Laughter.] I met him. Steve had been in the restaurant. They had shaken hands. And Steve refused to meet with him again or ever see him. And so it's a pretty odd tale.

MR. RUBENSTEIN: Well, you know, actually a similar thing is in your book on Albert Einstein, because Albert Einstein had an illegitimate child, gave it up for adoption. He then marries the mother, and they have another child, but they never go back and get the other child.

MR. ISAACSON: Ben Franklin has an illegitimate child who he does take responsibility for, but then who breaks with him and remains a loyalist during the Revolution. They never speak again and have this huge falling-out. Kathy, my wife, always asks, why do you keep writing about people who had affairs or illegitimate children? [Laughter.] And I say, look, it's only a coincidence. [Laughter.]

MR. RUBENSTEIN: So where did the name Apple come from? It seems like an unusual name for a computer company.

MR. ISAACSON: Steve, when he drops out of Reed College, and goes on this pilgrimage to India, spends time with a couple of Zen Buddhists – because they're all part of an ashram together – and they work on an apple commune in Oregon, owned by a guy he knew at Reed. And he used to prune the apples, and it was part of a commune.

He's coming back from that commune one day, back to Silicon Valley, to meet Woz – because they were thinking of forming Apple – and Steve says, we'll call it Apple unless we come up with a better name. It was because he'd just come back from the apple commune. But he also said, look, it's a perfect disjuncture. Apple, computer – they don't quite go together. They make you double think. But it's kind of friendly, as well as having a countercultural whiff to it. And then he said, and it got us ahead of Atari in the phone book, so. [Laughter.]

MR. RUBENSTEIN: Now, when he worked at Atari, I guess, for \$5 an hour or something like that – he apparently showed up with no shoes, and he never showered and didn't believe in deodorant. What was all that about?

MR. ISAACSON: He felt that if he ate a fruitarian diet – because he was always on what he called “my nutso diets” – and after he came back from the apple orchard, he had read a book by, I think, Arnold Ehret or something – called “The Mucusless Diet,” which means you don't even eat grains. You only eat fruit and vegetables. He believed that if you followed such a diet, you wouldn't have any body odor. It was a mistaken theory. [Laughter.]

So they put him on the night shift. Al Alcorn and [Nolan] Bushnell, who, you probably remember, who ran Atari at the time – they think he's a pretty clever, cool engineer, but they put him on the night shift –

MR. RUBENSTEIN: Because nobody wanted to work with him, because he smelled too much.

MR. ISAACSON: Because nobody wanted to work with him. He was a bit of a handful then, and later. But the good news is, Woz was working at HP just, a couple miles away, and Woz loved playing these video games. So he would come at night and play the games, – so they got two Steves for the price of one.

MR. RUBENSTEIN: So when they start the company – Wozniak and Steve Jobs – they start the company; that was OK. They make a computer; it revolutionizes home computing and so forth. But then Steve Jobs gets kicked out of his own company. How did that happen? He started the company. How did he actually get kicked out? It's an odd phenomenon that I've always observed – it's not a good idea to kick out a founder.

MR. ISAACSON: He was a tough guy to work with, Steve Jobs. He was a demanding boss. He took the Mac team – which, Apple II was the other product they had, which was making a lot more money. That was Woz's baby. But Steve becomes fanatical about the Mac, and he drives everybody nuts, so much so that they really need a CEO. So he helps recruit John Sculley of PepsiCo.

They have this father-son relationship for a while; they love each other. But it was doomed, that relationship. When the Mac comes out, Sculley has overpriced it. It doesn't actually do that well after the initial, first few months. And the board, which is filled with father figures for Steve – Arthur Rock, Mike Markkula, John Sculley – eventually vote to kick him out on Memorial Day weekend of '85.

MR. RUBENSTEIN. So he's kicked out. Then what does he do? He wandered around for a while, but he actually went and bought Pixar. How did he actually make Pixar into the company that it became? He paid about \$10 million or so for it initially, and then it became a very valuable company. How did that happen?

MR. ISAACSON: George Lucas sold the digital division of his company, which did two things big. One is it made a machine, called the Pixar machine, that rendered animation digitally. And the other was that it had software – RenderMan, it was called. They had one guy sitting at the company, a young guy who had loved the Disney company, had worked there, but been laid off at Disney, named John Lasseter. His job was to make short animated films to show off how cool the hardware and software were.

So he made something called Tin Toy, and he has this dream of doing things. And Steve realizes the hardware ain't working – but this guy is an artist. Steve was hard to deal with at times, but if you were an artist, and you were passionate about perfection, he loved you. So Steve bonds with this guy, John Lasseter, and eventually just keeps writing the checks until the guy makes “Toy Story.”

MR. RUBENSTEIN: While he was doing that, Apple wasn't doing that well. Eventually, they call him up and say we'd like to buy your company. Why don't you come back? How did that happen?

MR. ISAACSON: The other thing Steve did was start another company, called NeXT, which was a computer company that indulged all of Steve's best and worst instincts – meaning it was

perfectly designed, with a \$100,000 logo by Paul Rand, a perfect cube, totally powerful, totally overpriced, and totally impractical.

And it was a flop, but it had a wonderful operating system based on UNIX. And Apple, which had coasted along for a few years after Steve left – and by the mid-to-late 1990s couldn't even create an operating system for itself. The Apple operating system had not been upgraded. It was down to 4% of the market compared to Windows OS from Microsoft. They needed it, so they had to buy an operating system.

Gil Amelio, who was then the CEO of Apple, grits his teeth and buys NeXT for the operating system. But if you buy NeXT for the operating system, you also get Steve Jobs back. And as Wozniak said when I talked to him about it, Gil Amelio meets Steve Jobs, game over. Within 6 months, Amelio was gone.

MR. RUBENSTEIN: Steve became the CEO again, and then as soon as he became the CEO, he said to the entire board who just gave him the job, you all should leave?

MR. ISAACSON: Yes, you've got to get out of here. Including Mike Markkula, his original angel investor.

MR. RUBENSTEIN: So Apple is back under Steve's domain, but the series of products that changed the world in many ways – or, at least, some people did think so – the iPod, the iPad, the iPhone – how did they come about? The iPod, whose idea was that? Was that Steve Jobs' idea, or where did that come from?

MR. ISAACSON: Well, first of all, the key to understanding Apple is that the control freakish nature of Steve gives him the desire to have end-to-end control of products – unlike Microsoft, which will license out, you know, Windows to every hardware maker from HP to Compact to Dell. They want to integrate everything, which is not very open. People can be against that system. But it makes for an easier user experience if everything's integrated.

So they do that for 4 years or so after Steve comes back. Then they realize, we're successful again – because the iMac and others are successful – and that end-to-end integration means we can do something that nobody else can, which is that there are a lot of mp3 music players kicking around the market, but they're complicated, and they have to fit into Windows systems, other systems, fit into different types of computers.

So they have a complexity built into them because they have to work with every computer, and you have to make your playlists on the actual device. He said, we love music – all music players totally suck. We're going to create one that will be pure and simple, because we have that end-to-end integration. So really, within a year, they find a way to do the iPod.

He keeps saying, make it simple, make it – he has a rule, which is, I want to get to anything I want – any song or whatever – within three clicks, and it's got to be intuitive, and no manual. So, you know, they look at the interface. If you look even at Windows – at Microsoft Word 2010 – it has more stupid buttons and things that make you do things, and final markup and all that. Steve kept saying, simplify, simplify, simplify. So everything's in three clicks. You know, there was a screen saying, do you want to search by artist, song – and he said, why do we need that screen? We don't need that screen.

Finally, when he does the track wheel and everything else, they have only one button, which is on and off. Steve asks the most brilliant question – why do we need that button? Why do you need an on/off button? If people stop using it for five minutes, it can slowly power down and go dormant. But you don't even need that button. So the iPod is an absolute Zen-like product of beautiful design, and that starts them in the consumer products business.

MR. RUBENSTEIN: So the iPhone – whose idea was it to have a smartphone?

MR. ISAACSON: Well, so if you're doing the iPod, all of a sudden it's like 20% of Apple's revenue. It is a huge success. If you're a normal person running a company, you're happy. Steve is panicked and upset, because he says, what could cannibalize us? What could kill us?

What can kill us is if people who make phones come up and are smart enough to know how to put the music in the phone. Because people don't want to carry two things around, so as soon as some telephone manufacturer is smart enough to put it on your Blackberry or your Motorola Razer or whatever it may be, we'll be screwed. So he says, before we get cannibalized, we'll cannibalize ourselves. We're going to make an iPod that is also a phone. And he did that, and the iPad – they were actually working on the iPad before the iPhone, but did they –

MR. RUBENSTEIN: Did they ever dream that the iPad would become what it became?

MR. ISAACSON: No. Otherwise they probably would have done it first. What happened was, they were looking at the iPad, and he was particularly annoyed at somebody who worked for Bill Gates. In fact, they were at a dinner together, this guy who worked for Microsoft, Bill Gates, Steve. [Laughter.]

This guy's going on and on about Microsoft has a tablet; it's got a stylus; and we're going to put all these computer people out of business. Steve says, why don't you put a stylus on – already you have one extra thing. God gave us 10 styluses; we don't need an extra one. This guy was such an asshole, I decided we were going to do – [laughter] – our own tablet and show them how to do it.

So what they come up with is, instead of a stylus, it's, you know, multi-touch – you know, a touch screen in which you can do everything – and not only touch it, but use many fingers and touch it, which is what we call multi-touch.

They come up with that idea. At the time, they were wrestling with how to make the iPod's track wheel work for making it a phone, and it didn't work well. So Steve said, let's go for the way we want to do it. Let's take multi-touch and use it for the phone.

MR. RUBENSTEIN: Well, the multi-touch was maybe invented by – some people in Delaware had –

MR. ISAACSON: Right. FingerWorks.

MR. RUBENSTEIN: Other things that Apple did were really technologies that other people had invented. Did they actually invent anything at Apple that was really new? Or were they just taking other things and packaging them better?

MR. ISAACSON: You know, Malcolm Gladwell wrote a really good piece for *The New Yorker*, calling Jobs the tweaker, which makes the point that he didn't invent everything; he just tweaked what other people invented. There's some truth to that, although I think the word "tweaker" is far too diminishing for what that was.

In the end – you can start at the very beginning when he goes to Xerox PARC, sees the graphical user interface that Xerox has developed, and then says, I want this for the Mac. He takes it and improves it tenfold. I mean, you couldn't drag and drop folders on the Xerox Star or the Alto that they did. And Xerox put out a computer with that graphical interface well before the Mac came out, and it totally flopped.

So, as T.S. Eliot said, between the conception and the reality falls the shadow. That's a big deal, is being able to execute something right. Now, they'd buy something like FingerWorks and buy the rights to multi-touch from it. They buy many things, including – the guts of the mp3 player comes from another company. But everybody in this room is in businesses like that. The question of making it work is what counts.

MR. RUBENSTEIN: Now talk about the retail. Most people said that you don't have your own retail stores if you're in the computer business, or that kind of business they were in. Whose idea was it to have those retail stores, and who designed them?

MR. ISAACSON: That was totally Steve's idea, because he liked to control things from end to end. And, you know, at the moment, in the iPhone or iPad, he even controls the chip. I mean, they make the ARM microprocessor, all the way through the hardware, all the way through the software, all the way through what was announced this morning – which is the iBook 2 and iTunes store and iTunes U, new software. He controls everything, hardware to software.

But there's one thing he's not controlling, which is the experience of buying the thing – because you go to a big box store, back 10 years ago, and it's Best Buy. The clerk gets a spiff from Compaq or HP or whatever. He's pushing one computer or another. Steve says, I want to control the retail experience. He goes to the board; the board says that's a really dumb idea; Gateway is collapsing because they've tried to build too many stores.

He decides, as usual, to totally ignore the board, but he brings Mickey Drexler in from the Gap to join the board. Mickey Drexler says, you can do it, but do one thing first, which is build a prototype first. So he finds Ron Johnson, who was then at Target and had brought, you know, that beautiful design sensibility to Target's stores. They walk the Stanford mall and look at the stores and figure out that stores are supposed to be a statement, that they're supposed to be absolutely simple. The two of them just obsess for a year and focus on building the perfect store.

MR. RUBENSTEIN: Now you say he walked with him. Steve Jobs apparently loved to walk with people. That's how he made decisions. You walked with him; he walked with everybody. What was all that about?

MR. ISAACSON: I don't really know. As Bill Gates said, when he went down to visit him once, and Steve was furious because – this was very early on – he thought that Gates had ripped off the graphical user interface when he was creating Windows in '85 – he said, he insisted on going on a walk with me, which is not a management technique I use. [Laughter.] But I think Steve liked to focus, and if you were walking and talking, you just got him really going.

MR. RUBENSTEIN: What was his relationship with Bill Gates? Adversarial?

MR. ISAACSON: The most complicated, wonderful, interesting relationship you could imagine. It's like I said in the book – the binary system in astronomy, where two stars have such a gravitational pull that they are linked in orbit, in a way. It begins in the early '80s, when Microsoft's a tiny company and Apple II is taking off – it was a much bigger company, Apple. And Gates and others are writing the software for it. He kept coming down to Cupertino to meet with him. And he said, I saw the reality distortion field. I mean, it was just so – you know, he just told me amazing stories.

In the end, though, the more important thing than just what a personality love-hate relationship they had with each other, is the fact that they represent the two different sides of the digital debate – Apple being the most closed of all models, which is, you make the hardware, the software, and it's totally integrated and you don't license out the Apple operating system for somebody else to put it on their hardware. Bill Gates, of course, licenses out everything – you know, it's not exactly open, but it means you can use his operating, his software, on any device, his whatever. Both those models work. You're seeing that fight right now, where Android is the open model compared to Apple OS, which is a closed.

So they have this fight their whole career over this. But you mentioned Steve coming back in '97 – the first phone call he makes almost is to Bill Gates, saying, I've come back to save Apple, you got to come save it with me. Bill Gates, great rival but also great – flies down and says, OK, we're going to do it; agrees to invest; agrees to be at that great MacWorld in Boston on the screen talking about it.

The other call he made was to John Warnock at Adobe, saying, you got to do this for me. Adobe says, no, you got too small of a market share. We're not going to make Photoshop and Director and all the things for the new Mac operating system. Steve never forgave them. So if you pull out your iPhone and wonder why Adobe Flash doesn't work – [laughter] – it will never work on your iPhone or iPad.

So in the end, he and Gates still get close. And, if I may go on, near the end, when Steve is very sick, Gates wanted to come visit him down in Cupertino and was trying to arrange it. Steve is not the nicest person in the world, but still intense, you know – he finally says – I'll use a polite word – what a jerk. The word he used began with A. He thinks I'm dying and wants to come visit. He wouldn't do it.

But finally Bill Gates arrives in Cupertino and just comes to the house, knocks on the back door. There's Eve, the youngest daughter, doing her homework; she's like 11; doesn't quite even know who Bill Gates is, but Bill Gates says, where's your father? Eve points to the downstairs room where Steve was then living. And they talk for four hours about, you know, being the pillars of this age.

And finally at the end, Bill Gates, who's very, very gracious, says to Steve, You know, I never thought the integrated end-to-end model was going to work, but you proved it could work. And Steve, who's not very gracious, at this point says, Well, you proved that your model could work as well. And I'm thinking, as a biographer – because I'm around, and I'm hearing both sides of this right away, in almost real time getting the debrief on this meeting – I thought, what a wonderful sort of final scene where they all make up in the sun, you know.

But then Gates says to me, You know, one thing I didn't say to him was, it works, but it only works if you have a Steve Jobs doing it, an artist with a passion for perfection. It was Steve's artistic sensibility and his perfectionism that made that integrated model work. And I thought, well that's sweet. So I tell Steve Jobs this on my next – [laughter]. Steve looks at me and says – I'll use the word this time – what an asshole. [Laughter.] He said, Anybody can make the end-to-end model work. He could have made it work; it's just that he has no taste. [Laughter.]

And I say, well, there goes the sweet ending of the book. But I say to him, Steve, you said to Bill that the Microsoft – his model worked as well. Steve said, yeah, of course it works. But it only works if you don't care about making crappy products. That's all Microsoft ever made, was crappy products. [Laughter.] Hallelujah Chorus at the end.

MR. RUBENSTEIN: But Bill Gates retired at maybe 50 years old and devoted himself to philanthropy. Why did Steve Jobs seem to have no interest in philanthropy? And what's going to happen to all the money that he left?

MR. ISAACSON: Steve had no strong interest in philanthropy, publicly in particular – meaning, whatever he gave, he gave very quietly. Gates asked him to do the Giving Pledge, which Steve refused to sign. Steve Jobs' wife is very, very interested in philanthropy and has been a great leader in the education reform movement. But when Steve and I talked about even education, and Bill Gates' philanthropy and what they were doing in education, he said, I could focus on that and try to reinvent philanthropy or whatever; or I could focus on what I do best.

And I suspect – this is me talking, not him – that the iPad will do more to reform education than all of, say, the Packard Foundation and Gates Foundation education programs. Even today, when you go home tonight, you'll read that they released a textbook maker for iBooks, as well as iTunes University, which will totally disrupt the textbook industry. It was one of the last things he talked to me about in the book, and I have it in the book – his desire that textbooks will be interactive and online. So in some ways, that's what he'll do. As for his money now, I do not know.

MR. RUBENSTEIN: After all the time you spent with him, do you admire him more than you did before you started the book? Or did you come to dislike him a bit because of all the things you learned about him?

MR. ISAACSON: Well, yes and yes. I admire him more. I thought, oh man, what an absolute – you know, because I thought, OK, he's one of 20 people who really helped to – but you look at the field, starting with the personal computer – then the music business, and now the textbook business, but the retail store business, the digital animation. He just transformed multiple industries repeatedly – the phone industry.

Secondly, he did it by leaps of the imagination and genius, or ingeniousness, I think. I began to totally respect his focus, his passion for perfection. I also came to see that the passion for perfection and passion for product is related to a sort of petulance and impatience and toughness. I don't think you have to be that way to have a passion for perfection, but he was that way. So I respected him enormously.

After my book came out, and after Steve Jobs died, there was a gathering of all the original Mac team or whatever. They were reading the book and talking about it and they'd ask the same question you did, which is, in the end, did you like him? And the answer was, well, we sure respected him and we sure would not have given up the chance to have been on that ride with him for anything in the world.

MR. RUBENSTEIN: And your book has now sold more than a million and a half copies. It's been the number-one bestseller since it came out. It might even become a movie. Who are you going to write about next? How can you top what you've just done? And did you ever expect the book would sell this much when you first started?

MR. ISAACSON: Well, let me just digress on the selling, because I know you're interested in China and we were just talking about it. Somewhat unsurprisingly, it's just selling very well in China, where, you know –

MR. RUBENSTEIN: It's been translated into 53 languages now.

MR. ISAACSON: So CITIC, the Chinese publishers – and I thought, I am doing my best for the American economy, because I am teaching an entire new generation of Chinese students, millions of them, that if they want to succeed, what they should do is drop out of college, take a lot of acid, and be a jerk to their supervisors. So I hope to be able to transform the Chinese economy. [Laughter.]

MR. RUBENSTEIN: Well, Steve Jobs said you can't really understand him unless you've taken acid, so do you think you really understand him? [Laughter, applause.]

MR. ISAACSON: No.

MR. RUBENSTEIN: OK, that's the right answer.

MR. ISAACSON: How's that for a safe answer, too? As for next – what I'll actually do next –

MR. RUBENSTEIN: What'll be your next book?

MR. ISAACSON: Yeah, I'm still kicking it around. I initially thought, after doing Kissinger as well as this, I think I want to go way back in history and not have to – I was thinking of doing Ada Lovelace, who most of you wouldn't know. Ada Byron Lovelace was Lord Byron's daughter. Lady Byron was not particularly fond of Lord Byron by the time she was growing up, and decided she should become a mathematician so she wouldn't be a poet.

She becomes a great mathematician and writes the first computer programs and algorithms for Charles Babbage's difference engine and analytic engine in the 1840s. So I was thinking of doing that. I think that's not a whole book, but I want to start with that. And I'm thinking of doing an entire history – this is a larger project – of the digital revolution, beginning with that as the prelude, but then in 1947, when Bardeen and Shockley and others invent the transistor at Bell Labs.

It would have, like The Wise Men did, six or seven friends interweaving – obviously, Bill Gates, Steve Jobs, among others – but it would be everything from that to the Internet to gaming, and how the creativity and innovation that didn't have one Edison-like inventor, but how this creativity of the past 50 years of the digital revolution came to pass.

QUESTIONS FROM THE AUDIENCE

MR. RUBENSTEIN: We have time for a few questions.

QUESTIONER: Thanks for writing the book. It was not just the subject, but how you treated it – it was fantastic.

But at the end of the book, in the part where you comment, give your personal views, you say that you think he's infused in the Apple DNA – something that, for decades, will put it at the forefront of artistry and technology. By the time I'd gotten that book, I actually sort of had the opposite feeling – that at every critical step along the way, even at the end, that his imprint really was what put them on the right course. I'm interested in your views on what you think will happen to Apple, how it'll be different without him there.

MR. ISAACSON: The theme of the book is how to be at the intersection of creativity and technology, art and sciences. Every product demonstration he did ended with a slide of this intersection of a street called the humanities and the street called the sciences. He said that's what Edwin Land at Polaroid taught me: I want to stand at that intersection, and I want Apple to stand there, too..

So at the last board meeting in August, when he's stepping down, after he reads his letter of resignation as CEO, some of the board starts gloating about HP, Hewlett-Packard, that day having gotten out of the computer and the tablet business and totally being screwed up. And Steve says, don't gloat. This is ridiculous. Bill Hewlett gave me my first job when I was age 13 and wanted a job. And he impacted and created a company that they thought would last for generations. And these bozos have now screwed it up.

I don't want that to happen at Apple. We have got to stand, a generation from now, at the intersection of creativity and technology. He has a road map of products – I have two paragraphs, I think, in my book about how he wanted to revolutionize the textbook industry. That was announced today. I think there's a couple more years of things that he had thought about. I think Phil Schiller, Johnny Ive, Tim Cook, Scott Forstall and Eddy Cue and others truly get it.

So I think Apple will be fine for the foreseeable future, while people who truly get it are still running it. But it's like the Disney Company. Walt Disney, who was also a difficult character, but also stood at the intersection of the sciences and the arts – that company went up and down a few times. But it's still encoded in the Disney DNA what Walt Disney was all about. And I suspect and hope that will be true of Apple, with the Jobs DNA.

MR. RUBENSTEIN: One more question.

QUESTIONER: On succession, was Tim Cook his clear successor? And what about the \$1 compensation for Steve versus what we've read about with Tim Cook?

MR. ISAACSON: Tim was always the perfect complement to Steve. He is a measured, thoughtful, quiet, calm person, who could do everything Steve didn't do. So they were a perfect pairing. I think that Steve discussed, as he properly should have – and the board told me he did – succession ideas all the way through, for the past few years, and how it would work.

It was always a combination of things, but it was always clear that the CEO would be, at least, as it happened this time, Tim Cook. And as for the compensation, there's a theme in the book, small theme, on Steve Jobs and money. Because he was not driven by money.

He said, I was incredibly poor and penniless, wandering around India with not enough money to buy even rice, and then I was incredibly rich – hundreds of millions – a few years later. So I've never had money be much of a driving force. So he worked for a dollar a year, but he always insisted on repricing stock options and other things. So it was a complex relationship to money. But in the end, Steve never got driven by money.

The proof is in the fact that if you look at the Forbes list, there are a lot of people who didn't create the world's – now second most -- but when Steve stepped down, it was the world's most valuable company, period – and there are 20, 30 people ahead of him on that list who haven't created the world's most valuable company. I don't think Tim Cook is also driven by money, but I think he's much more conventional in taking a conventional compensation.

MR. RUBENSTEIN: Walter, I want to thank you very much for this and to give you a gift. [Applause.] A copy of the first map of the District of Columbia.

MR. ISAACSON: Wow. Actually, Kathy will love this. I love this too, but Kathy collects things like this.

MR. RUBENSTEIN: All right, well, thank you very much for doing this. You did a great job.

Walter Isaacson

Walter Isaacson is the president and CEO of the Aspen Institute, a nonpartisan educational and policy studies institute based in Washington, DC. He has been the chairman and CEO of CNN and the editor of TIME magazine. He is the author of *Steve Jobs* [2011], *Einstein: His Life and Universe* [2007], *Benjamin Franklin: An American Life* [2003], and *Kissinger: A Biography* [1992], and coauthor of *The Wise Men: Six Friends and the World They Made* [1986].

Mr. Isaacson was born on May 20, 1952, in New Orleans. He is a graduate of Harvard College and of Pembroke College of Oxford University, where he was a Rhodes Scholar. He began his career at *The Sunday Times of London* and then the *New Orleans Times-Picayune/States-Item*. He joined TIME in 1978 and served as a political correspondent, national editor, and editor of new media before becoming the magazine's 14th editor in 1996. He became chairman and CEO of CNN in 2001, and then president and CEO of the Aspen Institute in 2003.

He is the chairman of the board of Teach for America, which recruits recent college graduates to teach in underserved communities. He was appointed by President Barack Obama and confirmed by the Senate to serve as the chairman of the Broadcasting Board

of Governors, which oversees Voice of America, Radio Free Europe, and other international broadcasts of the United States. He is vice-chair of Partners for a New Beginning, a public-private group tasked with forging ties between the United States and the Muslim world. He is on the board of United Airlines, Tulane University, and the Overseers of Harvard University. From 2005-2007, after Hurricane Katrina, he was the vice-chair of the Louisiana Recovery Authority. He lives with his wife and daughter in Washington, DC.