

SALZBURG GLOBAL SEMINAR
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5th Annual Lloyd N. Cutler Lecture on the Rule of Law

hosted by Justice Ruth Bader Ginsburg,

delivered by Eric E. Schmidt,
Executive Chairman of Google

and moderated by Jeffrey Rosen,
President, National Constitution Center

The Supreme Court of the United States
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Official Transcript

JUSTICE GINSBURG: Good evening and welcome to my work place. When Stephen asked me to substitute for Justice O'Connor as your host for tonight's event, I did not take my cue from Nancy Reagan. I just said yes.

Tonight's lecture bears the name of a man of many talents, one who was never at a loss. He could even gain seats on short notice for the Salzburg Music Festival's most popular productions. A Washington lawyer in the best sense of that term, Lloyd Cutler was counselor to presidents, advisor to the best and brightest here and abroad, devoted from the start to the Salzburg Seminar.

I participated in the seminar twice. In the 1980s, I taught in the Introduction to U.S. Law course offered to promising lawyers in mid-career from diverse nations. More recently, I took part in the Salzburg Global Seminar, with a faculty drawn from jurists and engaging thinkers in several countries. The seminar gathered an extraordinary student body of doers and thinkers in their own communities, most of them still in their 30s.

I remember particularly the Israelis and Palestinians in the group. In the course of the week, they spent dinner time together and then late evenings in the Bierstube arguing, tale telling, laughing, enjoying each other's company. The seminar formula worked as magic in drawing them together. Ever cognizant of their differences, they also appreciated their common humanity and their shared aspirations for peace and prosperity in the Middle East. If only that magic could exist in their homelands.

It is my pleasure tonight to invite our journalist moderator, Jeffrey Rosen, president of the National Constitution Center. He will launch the program. Jeffrey is a moderator and interviewer nonpareil. I know that from personal experience. Jeffrey has interviewed me time and again. He does it so well; I find invitations to engage in conversation with him irresistible.

MR. ROSEN: All right, ladies and gentlemen, I have to confess what may, in fact, be obvious to you which is that I have an incredible crush on Justice Ginsburg. I have had the great pleasure of interviewing you many times over the years and I think about three times in the past month alone which has been one of the greatest highlights of my life.

I am especially honored to be here for the first time as a moderator for

1 the Salzburg Seminar. We have a great treat in store for us. Eric Schmidt
2 is the Executive Chairman of Google. He has written a riveting new book
3 about how Google works, which as a new head of a nonprofit I found an
4 extremely helpful guide to hiring and firing and management and all
5 sorts of things, so I recommend it highly.
6 He's going to talk to us about technology and the future. And then I will
7 try to ask him a few questions about the relationship between his
8 thoughts and the Constitution. This is Eric Schmidt's first visit to the
9 Supreme Court and I think it's very striking that what we're going to talk
10 about tonight is what to make of a world in which Eric Schmidt and his
11 colleagues at Google in some ways have as much power over issues like
12 privacy and free speech and who can speak and who can be heard as
13 Justice Ginsburg and her colleagues do on the bench. So it's a remarkable
14 marrying of Silicon Valley and Washington. It's going to be a great
15 conversation. Please join me in welcoming Eric Schmidt.

16
17 MR. SCHMIDT: To say that it's an honor to be invited to
18 speak to you is like the understatement of the decade for me. To be here
19 in this chamber with all of you is one of the highlights of my life. So I
20 hope I can talk a little bit about the future and why we need to be a little
21 bit more optimistic.

22
23 All right? So I'm just going tell you the punch line right
24 then and there.

25 (Applause.)

26
27 And it being Google, I've got lots of facts. So I wanted to begin with a
28 quote from 1964. Isaac Asimov went to the World's Fair in New York
29 and he ruminated what the World's Fair would be in the Year 2014, 50
30 years later. So [the vision for] 50 years later, 50 years ago: "Much effort
31 will be put into the designing of vehicles with robot brains, vehicles that
32 can be set for particular destinations and that will then proceed there
33 without interference by the slow reflexes of a human driver. I suspect
34 one of the major attractions of the 2014 Fair will be rides on small,
35 robotized cars which will maneuver in crowds at the two-foot level,
36 neatly and automatically avoiding each other." I mean, come on, Isaac
37 Asimov. Let's hear it for Isaac Asimov.

38
39 So it is possible to imagine what the future looks like and I want to give
40 you some guidelines and some thoughts as to how this is going to
41 happen. There is an explosion in innovation worldwide in many, many
42 ways and you hear about it, you don't hear about it, but the numbers are
43 interesting. The U.S. took 50 years for GDP to double. China did it in 15.
44 It took 60 years for air conditioning -- I grew up in Washington, so I
45 understand the air conditioning -- to get to 80 percent of U.S. citizens.
46 And it took 10 years for 80 percent to have mobile phones. Things

1 happen quicker now.

2

3 And what's interesting is that we've got to talk about this differently. I've

4 been studying the question of joblessness. Now if you talk to a politician,

5 the number one issue for politicians is jobs, right, and how to create

6 more jobs. Do you know how to create more jobs? It turns out it's not

7 big companies that create jobs. It's not little companies that create jobs.

8 On balance, they create about as many as you lose in a competitive

9 market. Net new jobs are created by gazelles: relatively young, fast

10 growing, often venture-funded companies that do something new.

11 Interesting.

12

13 Here's a quote for you from an economist named John Haltiwanger who

14 is the sort of authority on this. "We have found that startups together

15 with high-growth firms which are disproportionately young, account for

16 70 percent of overall job creation in the United States." You want to

17 solve the problems of the U.S. in economic growth, figure out a way to get

18 more innovation and automation. Interesting. Okay.

19

20 Now there are some issues here. One of them is scale. There are these

21 new phenomena that are changing everything, so an example would be

22 Amazon, the ruthless efficiency of Amazon, lowering prices, good for

23 consumers, tough for competitors. Right? Or the effectiveness of Apple

24 or the scale of the Schenzhen manufacturing of China. Nevertheless on

25 balance, they create enormous numbers of new jobs which we need to

26 celebrate and of course, they bring prices down.

27 And so one of the questions that I have is as we get these scale platforms,

28 what happens to the world?

29

30 So I spend lots of time in Europe. Europeans are obsessed with the fact

31 that the Internet is being defined and controlled by American firms,

32 particularly West Coast firms whose values and political beliefs they

33 don't agree with. And trust me; I just came back from my second trip

34 from China in two months. They're obsessed with the same thing and

35 they blocked us all. So these are serious matters for us to sort of think

36 about.

37

38 Another point. Culture and creativity matter a lot. A quote from Jim

39 Cameron, the famous director of Avatar and others: "There's nothing

40 more powerful than someone who doesn't know what they can't do."

41 Right? Same principle. We have to find these people who want to make

42 this stuff happen. And what's interesting is [to] think about it in the

43 lifetime of most people in this room. Marxism has been discredited

44 because Marxism as a concept was a concept that was based on an

45 agrarian view of the world. But in fact, we're now in a knowledge view of

46 the world.

1
2 And the only thing that matters is aggregations of people moving
3 knowledge forward to make the world a better place. That's where the
4 economics come from. That's where the politics come from. That's
5 where the moral stuff comes from and so forth and so on. And so
6 competing in that and winning in that will turn out to be incredibly
7 important.

8
9 Now remember I said at the beginning I'm going to try to convince you to
10 stop being so depressed. Quote, this is Steven Johnson, "We're living the
11 dream and we just don't realize it." Over the past two decades what have
12 the U.S. trends, that's us, been for the following important measures of
13 social health? High school dropout rates, college enrollment, juvenile
14 crime, drunken driving, traffic deaths, infant mortality, life expectancy,
15 per capita gasoline consumption, work place injuries, air pollution,
16 divorce, male/female wage equality, charitable giving, voter turnout, per
17 capital GDP and teen pregnancy. Everyone here says oh, they're all
18 getting worse.

19
20 In every case, the trend is better. In every case, the trend is better and
21 these are the facts. So, in fact, the world is getting much better in dealing
22 with the implication of the knowledge economy. And the U.S. is in a
23 particularly strong position because of decisions made in Washington 70
24 and 80 years ago. Post-war, a set of very smart people figured out -- this
25 was back in the time when the U.S. was sort of the dominant world
26 economy that what we should do is we should fund research in
27 everything, science, math, whatever. And it was both because it was the
28 right thing and also because there was this looming Soviet threat.

29
30 Sixteen or more of the top universities in the world of the top 20 are in
31 the U.S. Hm. That's a serious achievement. It takes decades to build top
32 universities, a hundred years perhaps. And what's interesting is this
33 model, this integrated model between private philanthropy, public
34 philanthropy, things like the National Science Foundation, DARPA, the
35 National Centers for Health and so forth and so on, and the universities
36 and students is producing these rates of innovation. I'm going to take
37 you through some examples of this. But the fact of the matter is not only
38 do we have the right -- in the U.S. -- the right sort of attitude, if you will,
39 some form of capitalism with some social benefits, but more importantly
40 we've got the assets.

41
42 And who are the assets? The people. More importantly, the people
43 plugged into universities. Right? So I would not be very interesting if I
44 had not gone to very good universities that programmed me the correct
45 way. And I suspect every single person in this room, their educational
46 level and family, obviously, the culture that you grew up with is a major

1 determinant of this, why you're able to sit in this room.
2
3 So this iteration and constant challenge to the orthodoxy is what invents
4 new things. It's why things are so much better. I was talking to one
5 person who said people don't remember that when you and I -- referring
6 to me, Eric, grew up in Washington, we had one house. We had one car.
7 We had one black and white television. Dad worked. Mom stayed at
8 home and she cooked. Right? We were perfectly happy by the way.
9 Today that would be seen as poor in assets at a minimum. Our
10 expectations change.
11
12 So what is Google's view on all of this? So Google's job in some sense is
13 to do new and innovative things at scale. The thing that people always
14 miss about Google is [that] we figured out a way to invent stuff fast,
15 right? Some of it works, some of it doesn't.
16
17 So one way for you to understand our strategy and we'll talk about this
18 more, Jeff, is we want to make the Internet as easy to use as your
19 toothbrush and as ubiquitous. By the way, I checked, the toothbrush was
20 invented by a Chinese person. I didn't know that. About 700 B.C. so
21 we're clear. A long time ago. And it hasn't changed much. But the point
22 when you'll know that we're successful will be when you're not talking
23 about the Internet any more.
24
25 A hundred years ago, there was this huge fight, huge fight between AC
26 and DC [current], right? National newspapers. Huge fight. Politics.
27 Senators, so forth, corruption, God knows, whatever. We don't have
28 those fights any more. It's there. It's as ubiquitous as the plug that
29 always works.
30
31 But the other part of our strategy is moon shots that have very high risk
32 and very high payoff. I'll give you an example. So -- and bear with me, so
33 I'll talk a little bit about artificial intelligence-- but we set a set of
34 computers off without telling them what to think about. They started out
35 as intelligent with no knowledge. We thought that the best thing to
36 subject them to was YouTube, right? If you had a bunch of computers, if
37 you couldn't think of anything else to do with them, you'd have them
38 watch YouTube. So we had them watch YouTube for 11,000 hours, okay?
39 Mind numbing, I know, but they're computers.
40
41 What did they discover? I had hoped for a better result, but they
42 discovered the concept of a cat. A cat-- eyes, mouth, tail, motion, the fact
43 that other things which they had not discovered which turned out to be
44 people, like them, their emotions. I wish I could announce to you that in
45 this historic breakthrough that Google had done that we had discovered
46 number theory, Plato, Aristotle. But we discovered cats.

1
2 We built a contact lens that has the world's smallest battery in it and this
3 contact lens has a computer inside the lens, amazing, and it watches for
4 changes in a particular part of the vitreous that's in your eye which will
5 tell you your insulin state. Literally hundreds of millions of people will
6 use this contact lens rather than the blood pricking and so forth and so
7 on. Kind of neat.

8
9 Then last week we announced that we had a team that has taken nano-
10 particles-- a nano-particle is a very small one. It's a billionth of an inch.
11 It's tiny, tiny, little gold particles-- and coated them with antibodies and
12 figured out a way to attach them to bad cells, cancer cells, and count
13 them in your body. Interesting. And we have a device that actually sits
14 on your arm basically [sic] and counts them. Why is that important?
15 Early detection is the number one factor in cancer death outcomes.

16
17 These are innovations that you could never have thought of, but were
18 enabled by smart people and all this interesting technology. I mean I can
19 go on. Think about Google Glass. You've all seen the funny glasses and so
20 forth. And people who need to know things and use both hands,
21 surgeons, fire fighters, and police.

22
23 Now who are the people who invent these things? They're not normal,
24 okay? Right? I'm going to make a controversial claim. I'm going to say
25 that they're disagreeable. And I mean that in the nicest sense of the
26 word. They don't agree with the current outcome. They see the world
27 differently. They are divas. Now you've got to create a culture where
28 you don't just drive these people out. You have to put up with them. And
29 by the way, divas, they have a lot of needs. They need to talk to you right
30 now, right? [They] can't wait.

31
32 I was in line in the cafeteria on a Friday at 6 [PM]. We feed people
33 breakfast, lunch, and dinner. And this fellow who is bald who is about 25
34 years old, his name is Noam, runs up to me and says "I need 100,000
35 computers, right now." And I go, "What for?" He said, "We're starting
36 general intelligence and we're to be done by Sunday." I said, "Well, what
37 do you hope to learn?" He said, "We're going to learn and invent all of
38 human knowledge by Sunday." I said, "Can you do with 10,000
39 computers in the first hour?" And he said, "Okay."

40
41 [He] turns on the 10,000 computers. His program breaks. He fails.
42 That's the attitude -- by the way, he's still trying. In our lifetimes, he will
43 do it and it will be on a weekend having done something crazy and so
44 forth. And he'll still be bald, the whole bit.

45
46 What's interesting about these people is that they live in an alternative

1 economic universe. They don't live in the same universe that we do. If
2 they're working on this one thing, they don't ever worry about an income
3 because they know if they fail, somebody else will hire them. One,
4 because they're very smart. Two, because they're crazy. And three,
5 they're really, really arrogant, right? So you have to build your culture
6 around understanding these entrepreneurs, that their vision, that what
7 they're doing -- and by the way, so many parts of American system
8 directly are counter to what I just said. These are the people -- they're
9 annoying, okay? We don't want them. They're disruptive. But that is, in
10 fact, how these new ideas come.

11
12 Let me take you through some examples of science at what's going to
13 happen and I'll finish up and we can get to our questions. But I wanted
14 to get the programming right in terms of attitude. It's about education.
15 It's about individuals. And it's especially about these kind of slightly
16 obnoxious entrepreneurs that we sort of put up with. By the way, what
17 are their names? Steve Jobs, Bill Gates, Larry Ellison, Larry and Sergey,
18 on and on and on. Right? How many jobs do they create? All of them?

19
20 As a start, there are huge things going on in science. We have deep
21 molecular biology gains. We're close to knowing how the brain actually
22 works, the hardest problem of all. There are real improvements of
23 artificial intelligence. We're beginning to understand how humans
24 actually think, work, and play. There's a physics revolution in nano
25 technology. There are new materials. There's a new chemistry of the
26 small (phonetic). We're busy working on all of that and the explosion is
27 just beginning.

28
29 I want you to imagine with me some of the things that are going to
30 happen in the next five to ten years. Personalized medicine. The
31 sequencing of the genome and the fact that genetics research and genetic
32 sequencing is falling in cost, faster than Moore's law, means that in five
33 to ten years, you go to the doctor and there will be a routine genetics test
34 against whatever thing they're looking at. Everything will be sequenced.
35 And against those databases which I and others are funding, we'll be able
36 to figure out the exact problem you have for that category of diseases,
37 which turns out to be most of them, and give you exactly the best cure
38 that is known for exactly that combination because people differ in all
39 sorts of ways.

40
41 Today, when you go to the doctor, it's oh, we've seen one of you, white
42 male, so on and so on and so on, a complete change the way medicine
43 does. We're very, very close to having the ability to make cells using
44 biological materials. There's a technology called CRISPR which allows
45 them to turn on and off parts of the gene and they've discovered that
46 when looking at bad cells, turning -- sometimes turning them on helps.

1 Sometimes turning them off helps. That is the basis for many of these
2 evolutions.
3
4 Let's think about transportation. Uber is rethinking public
5 transportation for many of you who use it and it works really, really well.
6 Think about Tesla. Tesla rethought the automobile. You thought that no
7 one had any new ideas about automobiles. Tesla is actually a completely
8 new look at how an automobile should work and they just announced
9 two weeks ago what you could argue are largely self-driving capabilities
10 or close to it.
11
12 Think about education. The number one issue in much of American
13 discourse is how to change and reform our educational system which
14 again is very strong at the collegiate and research level and relatively
15 behind in the K-12 levels, as many people here know. A lot of you have
16 worked on this. How would you fix that? Start with the Internet.
17
18 It turns out it's shocking that kids learn differently. Ask any teacher.
19 They'll tell you. This kid learns this way. This kid looks that way. Maybe
20 we're all the kid that learned the correct way and the ones that aren't
21 sitting here are the ones that couldn't follow that way. But if they had a
22 different kind of way of learning, they'd be sitting here smarter than us.
23 We don't know. We didn't run that experiment. Now we can run that
24 experiment. Because now you can figure out on a per person basis what
25 exercises and what learning works for them, at their own pace using
26 [the] modern technology which is available.
27
28 Think about automation, the revolution of automation. The repetitive
29 tasks long crippling and dangerous are being eliminated by all of this.
30
31 Synthetic biology. In your lifetimes what will happen is people will take
32 your blood and then they will grow a new organ for you. Now I wish I
33 could tell you that this would mean when you're 100 you look like you
34 were 20. You're still going to look 100, but you're going to have a brand
35 new liver, kidney, or what have you. We're very close to being able to do
36 this because we can now culture the growth cells, the so-called stem cells
37 from your blood. It's another recent Nobel Prize, all happening. The
38 changes keep going.
39
40 Let's think about smart power grids, enormous innovation. Who here
41 would have said ten years ago that America would be the number one
42 exporter of natural gas and oil today and will soon surpass the number
43 one exporter in oil in the world, Saudi Arabia? That's shocking to me.
44 How did that happen? Because of technological innovation and the way
45 drilling and so forth is done.
46

1 We're rethinking cities. It turns out that nine percent of the space of a
2 city is devoted to parked cars. Probably not the highest and best use.
3 People are thinking and cities should become in a positive [way] more
4 dense, more active, more integrated and so forth because that's where a
5 lot of the great strength of cities comes from.
6
7 It's interesting. But the one that's really going to change everything--
8 and I'll finish with this example and then talk about some of the
9 implications of this is generalized AI-- I'll tell you about a test. This fellow
10 named Alan Turing-- who is the computer scientist hero, there's a movie
11 coming out about him called "The Imitation Game" and the technical
12 people here all know about this guy--was a mathematician who broke
13 codes for the British in World War II. He was persecuted afterwards
14 because he was gay and he nevertheless proposed, before he killed
15 himself, a test called the Turing Test. And the idea was that you'd have a
16 person, a computer behind a screen and on the other side you'd have a
17 person trying to figure out which was the computer and which was the
18 person. Now I've lived with this test my entire life. I have important
19 news. It's been passed by a computer. Interesting.
20
21 It was passed in June by a computer from the Russians simulating a 13-
22 year-old Ukrainian boy. And they couldn't tell the difference. Now there
23 have been many objections to this result because everyone who has a 13-
24 year-old boy knows they don't say anything. Try a 13-year-old girl. So
25 we're working on it. But in our lifetimes, again, reasonably soon, we'll
26 get 13-year-old girls, too, who talk a lot.
27
28 But this notion of making us smarter has a lot of implications because it
29 means that in five years or so you'll have an assistant that's as good as a
30 human assistant that should be able to, for example, read your email and
31 respond to it. Does Eric want to go to D.C. or does he want to go to
32 Philadelphia? Does he like this restaurant or that restaurant? Do you
33 think you'll use that? Absolutely. You don't actually want to spend all
34 your time thinking about that. You actually want to go on with your life.
35 It makes you smarter. So, these breakthroughs are coming and they're
36 going to come relatively fast in the next decade.
37
38 So this concept, right, about computers augmenting human intelligence
39 actually dates from 1960. This is not a new idea. We've been working on
40 it in one way or the other for a very long time. So I would argue that the
41 case for optimism is based on a couple of things. 1965, a guy named
42 Licklider [voiced] a modern maxim [which] says people tend to
43 overestimate what can be done in one year and underestimate what can
44 be done in five or ten, right?
45
46 Everybody here has a smart phone, right? Ten years ago, none of you

1 had one. For most people-- interesting thing about smart phones-- 97
2 percent of people sleep with a smart phone on one side of the bed
3 plugged in and the spouse or significant other in the other, right? True?
4

5 Another statistic. If you're a child and you wake up, you're online until
6 you go to sleep, 16 hours or whatever. If you wake up in the middle of
7 the night as a child, you do the equivalent of checking your email. They
8 are literally connected every minute of their being awake. That's how
9 profound these things are.
10

11 So to me, innovation and smarter people solve a lot of the problems that
12 we want to complain about. So not only does the data seem to be getting
13 better, but I think there's a lot of evidence that the future is going to get
14 better.
15

16 And I'll finish by talking about positions for us to take. I think this is
17 from H.G. Wells, "Civilization is in a race between education and
18 catastrophe. Let us learn the truth and spread it as far and wide as the
19 circumstances allow for the truth is the greatest weapon we have."
20 When you look at the problems that our political leaders are addressing
21 around the world, in almost every case more education, more
22 civilization, more of a buy-in to the international system would cure
23 most of the problems. Right? He was right. We are right.
24

25 So principal growth, growth in the knowledge economy and science and
26 energy make all the difference. What I hope I've done is given you a
27 sense that we're busy building a future that's even better than the good
28 future we have right now. Thank you very much. Thank you all and
29 thank you, Jeff.

30 (Applause.)
31

32 MR. ROSEN: Thank you so much, Eric Schmidt for that
33 powerful case for technological optimism. You've given us a series of
34 technologies that will emerge over the next five to ten years from Google
35 Glass, to contact lenses with sensors, to self-driving cars, to artificial
36 intelligence, and you've described ways that they may make us smarter
37 and improve our world.
38

39 Because of this august setting and because of the tradition of the Cutler
40 Lectures, I've been asked by the Seminar organizers to press you on the
41 constitutional implications of some of these technologies. And it may
42 seem odd to talk about constitutional implications because, of course, the
43 Constitution doesn't bind Google.
44

45 MR. SCHMIDT: It does bind Google last time I checked.
46

1 MR. ROSEN: I brought, of course...now I travel with my
2 pocket Constitutions.

3
4 MR. SCHMIDT: Oh, my goodness.

5
6 MR. ROSEN: I'm giving you one.

7
8 MR. SCHMIDT: Excellent.

9
10 MR. ROSEN: So the First amendment says Congress
11 shall make no law. It doesn't say Google shall make no law. And the
12 Fourth amendment talks about the right of the people to be secure in
13 their persons, houses, papers, and effects. But it's been construed not to
14 bind private companies.

15
16 So I want to start with ubiquitous surveillance and this is my question. I
17 was at a conference at Google in 2007. It was a Legal Futures
18 Conference, one of the most interesting I've been to. And Andrew
19 McLaughlin, who was then the head of Public Policy and went on to the
20 White House, said he imagined in five years, Google would be asked to
21 take feeds from all the surveillance cameras in the world and put them
22 live and on line. And he imagined if you did this, then anyone could click
23 on a picture of anyone in the world, say me, back click on me to see
24 where I was coming from, forward click to see where I was going and
25 basically have 24/7 ubiquitous surveillance of anyone at any time.

26
27 And now with Google Glass and flying drones that the police are actually
28 using to track suspects, this is not science fiction. So my question is (a)
29 how will this ubiquitous surveillance emerge? What's the technology
30 that will allow people to track each other 24/7 on Google? And (b) if
31 Google were asked today, if you were asked to make this technology live,
32 would you say yes or no?

33
34 MR. SCHMIDT: So first, I'd like to make clear that to
35 both Andrew's comments and would we do this today, the answers are
36 no and no. And if necessary, I'll put N and O on a blackboard so there's
37 no ambiguity here because people get very worked up over these issues.

38
39 Now I want to give you a thought experiment and again, I'm not
40 endorsing this, so please don't shoot me, especially not in the Supreme
41 Court. You believe the number one issue in this country is crime. In this
42 thought experiment, that's what you believe. And you would like crime
43 eliminated. And I'll tell you how to eliminate crime. I can eliminate
44 under this scenario all crimes except crimes of passion by a relatively
45 straight-forward plan. Public cameras everywhere in every public
46 setting, not in your home, but everywhere else, public hallways, public

1 buildings, and so forth, ubiquitous face recognition, ubiquitous person
2 tracking and immediate monitoring. And in fact, we could probably
3 detect algorithmically the use of a gun, the flashing of a threat, the use of
4 marijuana and so forth.

5
6 If you want that state, it is at least technologically possible for a dictator
7 or an authoritarian regime to do it. It obviously violates a gazillion laws,
8 right? And I'm not a lawyer, but it's pretty obvious, I think, and you all
9 are lawyers. I'm sure you see why. But I say it because these are
10 ultimately boundary checks. If you're going to survey everyone because
11 of the fear of an individual, you better have a pretty good case that that
12 fear of that individual affects the lives of many. That's my own view. So
13 in our case, we are well aware of this.

14
15 And I'll tell you my first story of this which is we -- Larry and Sergey are
16 running a meeting. We look at products. A 24-year-old kid comes in and
17 he's very proud of himself because he's built an app which on a smart
18 phone will predict not only where you're going, but where your friend is
19 going and tell you when you're going to meet up. And I get this white red
20 face and I'm like collapsing at the end of the table and Larry and Sergey
21 decide to play into it. They say this is the best idea we've ever had and
22 making my life just miserable. Of course, they're playing with me. And
23 this kid doesn't realize that this is a serious issue. Because he doesn't
24 care. He's just an engineer.

25
26 The concept, however, of us having real time data that predicted not only
27 where you are, but where you're going is a huge set of issues. We
28 ultimately solved this product by releasing this product by allowing it to
29 misstate where you were, right? In other words, it was not reliable.
30 That's how we solved that problem.

31
32 Next problem, Google Glass comes along. Every person in this room
33 would like Google Glass to have an app which would tell you the person's
34 name of the person you are speaking with whom you've forgotten.
35 Right? Ah, yes. Hi, Tommy, I met you before. I met you in 1997. I'm so
36 happy to see you again. Yes, yes, your wife's name is Ruth and he goes on
37 and on, right?

38
39 The misuse of that app is so horrific in terms of stalking and bad
40 behavior that we have a policy that we won't allow those apps on Google
41 Glass and we actually reject them. So my position and I think Google's
42 position on these things is that just because you can do something,
43 doesn't mean you should. These technologies can be used to invade
44 people's privacy and it takes good judgment and good legal review and
45 so forth to really hold them back.

1 MR. ROSEN: All right, for me, that is a very persuasive
2 answer. You said you should have good reason to track someone and
3 they should be guilty of a serious crime before you can follow them.
4

5 MR. SCHMIDT: And perhaps, how about a court order?
6

7 MR. ROSEN: That's my question. How about a court
8 order? Because so far all the choices you've described are things you
9 decided to do as a matter of design. Lawrence Lessig says "Code is law."
10 If you had not chosen to put a bug in the predicted technology or had
11 allowed the name to appear on Google Glass, our society would be
12 transformed. So is it appropriate for us to live in a system where your
13 decisions shape our constitutional values or do we need a constitutional
14 amendment to regulate Google?
15

16 MR. SCHMIDT: Well, I hope they would regulate some
17 of the other companies as well, if there were such a constitutional
18 amendment. I think that the privacy framework and these legal
19 frameworks are pretty well established and they're argued. But [what]
20 I've heard about the law-- and again, I speak as the amateur in the room--
21 is that the law is sometimes not as specific as an engineer would like, so
22 that the legal process, the initial court, the appeals court, the Supreme
23 Court are to some degree about working out the bugs in the rules, right?
24 We really did mean this and we really didn't mean that.
25

26 And that's probably the best model to address some of these issues. So
27 for example, if you look at the NSA spying on American citizens in the
28 form of Section 215, there's a robust debate among different appellate
29 courts as to whether that was a violation of the fourth amendment. And
30 again, you covered this, [so] you understand this stuff pretty well. My
31 position is [that if] you collect the data, that data could be used against
32 you, right? So you better be careful as a government when you use your
33 monopoly power to collect data that might be used against citizens.
34

35 So my view on a lot of this stuff is I actually don't mind that this data gets
36 collected, but for every piece of data that's collected about a citizen, by a
37 government, I want to have a list of rules as to what it can be used for,
38 when it can be used to avoid violations of privacy, misuse, those sorts of
39 things. And we can debate what those are.
40

41 MR. ROSEN: That's great. You're absolutely right.
42 There is a robust debate about Section 215 as well as about even
43 whether 24/7 surveillance by the government would be
44 unconstitutional. Justice Ginsburg and her colleagues have not yet told
45 us whether if you don't have a physical trespass, the police can track
46 citizens 24/7.

1
2 MR. SCHMIDT: But let's use Britain as a better example.
3 So when you have this conversation in Britain, you have a completely
4 different conversation because the trust in the government is so strong
5 that there's something like three million surveillance cameras in Britain
6 now and when you're walking down the street, you are being surveilled.
7 [sic] They do use face recognition technology. The British citizens, as a
8 general rule, like this strategy.
9
10 If you then have the same conversation with Germans, they go crazy, for
11 obvious reasons. So there are differences in cultures and history and
12 legal matters, even among members of the European Union.
13
14 MR. ROSEN: It's a fascinating contrast. You're
15 absolutely right about Britain and Germany, but should the Brits be
16 allowed to surrender their privacy to the kindly Big Brother in the sky or
17 as the Germans feel is ubiquitous surveillance such an invasion of dignity
18 that citizens shouldn't be allowed to submit to it even if they want to?
19
20 MR. SCHMIDT: I'm on the American side of this debate,
21 but you can imagine that the British have built a legal system that they're
22 quite proud of and they believe that it's not been abused.
23
24 The Germans have also built a legal system and they have a lot of history
25 of abuse. So perhaps their reaction is grounded in genuine fears of what
26 happened.
27
28 MR. ROSEN: Right. Now speaking of dignity versus free
29 speech, as you know, we're about to see the greatest clash between those
30 values of the 21st century in this new right proposed by the European
31 Court of Justice, the right to be forgotten.
32
33 MR. SCHMIDT: Yes.
34
35 MR. ROSEN: Which comes from the French *droit à*
36 *l'oubli*, the right of oblivion, which is very French. It's right out of Sartre,
37 you know.
38
39 MR. SCHMIDT: Raise your hand if you'd like
40 information that's on the Internet that's embarrassing to be removed.
41 That's okay. I'm part of the list, okay?
42
43 So in the U.S., the laws don't seem to favor that. In Europe, the European
44 Court of Justice which is roughly the equivalent of our Supreme Court,
45 although ours is actually better--
46

1 MR. ROSEN: Nicer building as well.

2

3 MR. SCHMIDT: Well, I think better for many reasons. In
4 May, it heard an appeal and made a remarkable decision which I'll
5 describe. As it turns out that in Spain, there was a gentleman who 20
6 years ago failed to pay his taxes on a housing transaction. I'm busy
7 trying to buy real estate in Spain and I can report to you that this is a
8 common occurrence. So nevertheless, he is found guilty. There's an
9 article about him. It's embarrassing to him and so forth. And there's no
10 question as to his guilt. It was 20 years ago.

11

12 He sues Google to take this information down and we choose not to take
13 it down because if it's published, we figure it's out there, it's in the news
14 and so forth. He gets all the way to the European Court of Justice and
15 they find, remarkably, that Google as a particular kind of data operator
16 and the other search engines, if the person is not a public figure and if
17 the person -- and if the information is not of general public interest,
18 Google has to take it down. Interesting.

19

20 Now by the way, they didn't bother to define to us engineers what is a
21 'public figure' and they didn't define to us engineers what was 'in the
22 public interest'. And furthermore, it has the force of law and so forth.
23 And they ordered Google to set up this. So long story short, we've
24 created a group in Europe that is busy looking at these requests. So far
25 there have been more than 150,000 such requests. About, roughly
26 speaking, half get granted and half don't. So which are the ones that we
27 grant? Well, the ones that are obvious errors, the ones where it's some
28 innocent person who is caught in. Which ones do we obviously deny?
29 The guy who is a sex crime person, who is clearly guilty and so forth and
30 so on and wants his privacy back. Well, the answer is no.

31

32 Now the most bizarre thing about this decision is it doesn't apply to the
33 newspapers. So if this thing about you is taken down, it's still in the
34 newspapers. And Google is opposed to this decision for many reasons.
35 And I've said this many times, but to try to be sympathetic to their
36 thinking; my friends are Europeans and I think most of us would agree
37 are very sophisticated people. And they use the Internet every day. And
38 they don't want what they see as the sewer of the Internet, all that bad
39 stuff, they don't want that stuff around. They don't want to see it. They
40 want the Internet to be kindly. It's a fair reading of what they want.

41

42 Now we'll see how this goes because there are plenty of examples of
43 issues. So how would you feel if somebody who was a minor criminal
44 lived next to you? You might want to know. You might not want to
45 know. Under this assumption you would search for it and you would not
46 find it.

1
2 Another example, you have a person who is misogynist, somebody who
3 truly hates women, and he publishes his thing and then women criticize
4 him. He's not a public figure. He requests that we delete the women's
5 criticisms. You take it down. I'll give you example after example right in
6 that boundary. And because we'll find some workable compromise and
7 my guess is [that] this right will be around for a long time. If you're a
8 politician, you'd probably rather just blame Google for making the wrong
9 decision, right?

10
11 MR. ROSEN: So as an American first amendment
12 enthusiast I agree with Google's opposition to this decision. It's so broad
13 that if someone -- I guess you can't Tweet in the Supreme Court, but if
14 someone went outside after the show and Tweeted that we had had a
15 boring conversation, you or I could object that this violated our dignity
16 and a privacy commissioner would have to decide if we were public
17 figures and if they guessed wrong under one version you'd be liable for
18 up to two percent of your annual income which I think is \$55 billion last
19 year per incident. That tends to concentrate the mind. Does this suggest
20 that the Google's hope that information will be free may falter on
21 constitutional and legal restrictions abroad? And should we be
22 concerned about that?

23
24 MR. SCHMIDT: I'm not as worried about it as I may
25 sound. I'm more describing how cultures are dealing with the
26 ubiquitousness [sic] of the Internet and I think it's fair, having spent a
27 decade listening to these, that every case is different and every country is
28 different.

29
30 The ones we get upset about, we're upset about the right to be forgotten,
31 but we're really upset about -- well, let's think about it. There was a
32 video posted insulting the king by putting shoes on the top of his head--
33 which is very insulting in Thai-- by a person who put it up for 30 minutes
34 and then left the country. The government at the time banned YouTube
35 for a year. We didn't know about it. We would not have allowed it had
36 we -- we would not have approved it.

37
38 Now did they do that because they were annoyed at this terrible
39 desecration of the king? Or did they do this because there was a great
40 deal of criticism of the military generals on YouTube. You decide.

41
42 In Turkey, the prime minister does his very best to censor the Internet
43 when it comes near elections and indeed shuts down Twitter during that
44 period. We worry, the right to be forgotten is annoying, but we worry
45 when the political leaders use these tools and these laws to prevent
46 political opposition which is, by the way, why we've had so much trouble

1 with China. Same reason.

2
3 MR. ROSEN: So the two examples you just gave of
4 YouTube videos in Thailand and Turkey show how much power Google
5 has about who can speak and who can be heard. I got interested in this
6 subject again in 2007. The New York Times Magazine sent me to
7 interview Nicole Wong who was then the Deputy General Counsel in
8 charge of deciding what came up and what stayed down on YouTube.
9 And her colleagues called her The Decider because she was literally the
10 person who was woken up in the middle of the night to decide what
11 could be published and what could not.

12
13 Now on balance, I think Nicole Wong and her Google colleagues have
14 made really some pretty good decisions about free speech including
15 most recently deciding to keep up the *Innocence of the Muslims* video at a
16 time when President Obama and the president of Egypt were calling for
17 it to be taken down.

18
19 My question is simply this: how should we feel about the fact that Nicole
20 Wong has so much power, and as The Decider in some ways doesn't she
21 have as much power over speech in some cases as Justice Ginsburg?

22
23 MR. SCHMIDT: Again, Nicole is very good, precisely
24 because she understands the legal framework and the fight. Google is
25 perfectly happy to fight if we have any chance of winning. But if our
26 employees are going to be imprisoned, then we have another
27 conversation. That's why the lawyers are in charge of those kinds of
28 things.

29
30 So let's use *Innocence of Muslims* as an example. This is a truly horrific
31 video. It was done by a guy who duped the actors into doing something
32 else. It was dubbed. It was sacrilegious to a region. It was posted. Why
33 did Google keep it up? Well, first place, we actually took it down in three
34 countries where there were riots. Why were there riots? It wasn't
35 because people had watched it. It was because people on television had
36 said that there was a sacrilegious video and please go riot. So we were
37 used as a pawn for other reasons. We have since reinstated it.

38
39 Why did we keep it up or reinstate it? Because it's satire. If there -- no
40 one confuses this with real religious thinking. If you can't stand an
41 information market where your religion is criticized, you've got a
42 problem. And we're not going to then take down all of the criticisms of
43 Jewishness and Christianity and so forth and so on in parallel. So you
44 take down the *Innocence of Muslims*, you have to take the others down,
45 too. We're not going to take any of them down.

46

1 MR. ROSEN: I thought it was a great decision and in
2 some ways it was better than the one urged by President Obama. And
3 these decisions are made ultimately by top lawyers like Nicole Wong, but
4 I learned the initial decisions are made by the first responders at
5 YouTube. And I was taken around the YouTube headquarters and my
6 guide said 'see if you can spot them'. And everyone is basically wearing
7 t-shirts and flip-flops and they're 22 years old.

8
9 MR. SCHMIDT: They are young. Just remember that
10 when you go on an aircraft carrier, those jets are piloted by 25-year-olds.
11 There's a reason why young people run a lot of the world and these
12 people have very good judgment for their age.

13
14 MR. ROSEN: I think you're doing a good job. But it's a
15 lot of power. Should it be regulated?

16
17 MR. SCHMIDT: Well, it's always attractive to regulate
18 something you don't like. I have a long list, by the way. And if we're
19 going to start, let's start with my list since I have (inaudible) and then we
20 can do your list and we'll do everyone else's list.

21
22 So what's the problem with regulating this stuff? It's called the chilling
23 effect. It's a chilling effect around speech, around innovation. One of the
24 reasons that the Internet is so controversial is that when all of us who
25 built it, we built it with what was termed "permission list innovation".
26 You don't need permission to build a new thingy that you connect to the
27 end of the Internet.

28
29 So people have connected toasters to the Internet, right, and
30 refrigerators to the Internet. Imagine if there was a rule that you had to
31 have permission from an Internet bureau before you connected
32 anything. This, by the way, was called AT&T in the old regime. Everyone
33 remember that, broken up in the '80? There's a reason why those things
34 don't work.

35
36 And the beauty of the Internet is we have this knowledge architecture
37 that links human beings together, all of us including the people we don't
38 like, and we can't get rid of them, right? And we're struggling through
39 evil behavior. I mean when we entered the Internet we didn't think evil
40 people would be on it. Just our friends.

41
42 I did one of the first networks and in my network not only did it only
43 have 26 letters because it didn't occur to me that there would be more
44 than 26 computers, but the password, I had an email flag which was -R
45 which allowed you to become someone else, just as a whim. I thought it
46 would be sort of cute. That's how naive we were in understanding the

1 reality of humanity versus the design.
2
3 But that openness is what's brought us to today. Don't cut it down.
4 Don't do anything -- you slow that stuff down and you affect billions of
5 people. Think about it. I'll get on a broad band push. Most of the
6 problems in the world could be solved by more access to information
7 and more critical thinking. Everything that we do, right, to get more
8 connectivity -- my favorite current example, is how would you like to
9 topple the regime of North Korea? So I went to North Korea and I've
10 been studying the prison camps. And the prison camps, by the way, are
11 as horrific as the gulags under Stalin or the concentration camps under
12 Germany. And yet, these people have nuclear weapons.
13
14 Well, a key assumption in North Korea is that the leaders are infallible
15 which means they don't lie. But of course they do. So a relatively little
16 bit of sowing of doubt would probably have a better regime change than
17 anything we could possibly do in any other military or other approach.
18 Information is very powerful, especially when it exposes leaders who
19 don't want to be exposed.
20
21 MR. ROSEN: One more question about comparative
22 constitutionalism. I need to thank you, first of all, for the fact that
23 Google's Ideas Lab has just given a great startup grant to the National
24 Constitution Center.
25
26 MR. SCHMIDT: Yes, we're very happy about that.
27
28 MR. ROSEN: It's to create a constitution-drafting lab so
29 that people from around the world who are drafting constitutions can
30 come and learn about the best models and engage in constitution-
31 drafting exercises. And we've created a great interactive with
32 Constitute-- which is the leading collector of global databases, which
33 Google also supports, where you can click on any provision of the Bill of
34 Rights and see the spread of that liberty across the globe. So you can see
35 how the Japanese Constitution cut and paste the American Fourth
36 amendment which General MacArthur did after the war. It's very
37 exciting. We're looking forward to really becoming the national center
38 for debate, education and ideas about how to draft constitutions. My
39 question is first are you going to continue to support us, since this is a
40 very good thing?
41
42 MR. SCHMIDT: We've just started. We'll have to see
43 how well you do. If you don't perform, we will stop.
44
45 MR. ROSEN: Good. I'm sure that we will do a great job.
46 The serious question is how can a lab like this draw on U.S. wisdom to

1 encourage countries abroad to adopt free speech-friendly, privacy-
2 friendly constitutions rather than the opposite?

3
4 MR. SCHMIDT: I would say that one of the great
5 American hegemonies has been the export of the Internet to these
6 countries because we are arrogant enough as citizens to believe that
7 we're right and they're grappling with open architectures, open
8 communications, the empowerment of individuals, especially people
9 who have never had a voice before.

10
11 Imagine if the Chinese had invented the Internet. It would be run very,
12 very differently. There would be censorship of all sorts of kind, deeply
13 embedded. So in some sense the industry and the community and many,
14 many people who have made this happen, they're on your side pushing
15 this model so the values of free speech and openness and sort of both
16 religious diversity, but also tolerance which is really sort of one of the
17 constitutional principles of America.

18
19 I think another thing that's going to happen is that the law will change
20 because computers will get good enough that they'll be capable of being
21 reasonably good paralegals. They won't have the kind of judgment that
22 you all do, but they'll be pretty good assistants. So all of a sudden the
23 question I always like to ask is what's the best practice here? You've
24 already asked that question of a computer and it can do a summary for
25 you of what the best practices are.

26
27 So the framework itself and its underlying values are unabashedly open
28 in America and then the tools that are coming will allow you to
29 synthesize best practices. The languages in human systems there aren't
30 that many variants. For example, systems that don't have independent
31 courts are corrupt. Countries that don't have independent policemen are
32 corrupt, right? On and on and on. Countries that don't have
33 transparency with how they spend money are corrupt and poorly run.
34 It's true whether they're kings or democracies. So over and over again
35 there's a set of principles like that, but I think we can, in fact, look at best
36 practices and discuss.

37
38 MR. ROSEN: I would like to keep going all night, but I
39 need to go to the audience. So my last question is this: when you think
40 about the right to be forgotten and the fact that we believe that the
41 American free speech tradition is the correct one, is there a case for a
42 little American free speech imperialism?

43
44 MR. SCHMIDT: Well, I'm somewhat in between the two
45 because there is speech that is hurtful. I'll give you an example. You
46 have a teenage child who does something stupid and everyone who has a

1 teenager or was a teenager has at least one memory of this. Do you
2 really think it's fair to judge that person by that error for the rest of their
3 lives? As a joke one day, I announced that the new policy should be that
4 people at the age of 18 should change their names. That wasn't me. But
5 with face recognition, that doesn't work. So I think we've got some
6 issues as a society to address.

7
8 There is the Barack Obama theory that since everyone smoked dope, it
9 was fine for the president to smoke dope. But I'm more on the personal
10 choice side and I think that people should have a right of some kind for
11 respect. One way to solve it is not with censorship but by de-ranking.
12 Literally by saying things that you did 30 years ago that were more or
13 less embarrassing, but not very relevant today are probably not as
14 important as the good and bad things you did over the last five years. My
15 guess is society will evolve to that.

16
17 MR. ROSEN: Absolutely fascinating. I think we have
18 just a bit of time for questions and we don't have mics, but we have a
19 room with great acoustics, so, sir.

20
21 PARTICIPANT: You had a lot of positive trends. What is
22 your assessment of the trends in income and equality?

23
24 MR. SCHMIDT: That's a very good question. The
25 question was what is my view on income equality? So here's roughly
26 what's happening. There's a hollowing out of what's called the middle.
27 And the elites, people who are highly educated, everyone in this room
28 have increasing returns to education. But the traditional middle class,
29 think of them as the person who worked in a factory, those sorts of
30 things, those jobs are largely going away because of automation. And
31 there are new jobs that are popping up, but they're typically in service
32 industries and they're typically at lower wages. And we see this. It's not
33 a new factor. It's been going on for 30 years.

34
35 And there's evidence that computers are exacerbating that gap. So
36 there's a worry that the future I'm describing will have a small
37 percentage of people who have been able to master all of this and then a
38 much larger group of people who either because of motivation or
39 personal problems or lack of education or what have you, just can't get
40 there and they get stuck in these service jobs and they can't get out.

41
42 There's a huge debate over what the magnitude is. Economists don't
43 agree. So again, when people don't agree, my position is [to] just use my
44 opinion or your opinion. That's my joke. And my opinion is that the
45 technology that I'm describing improves the dumb people's
46 opportunities, too, to put a point on it.

1
2 When people are so elitist that they say those people can't do anything,
3 they're wrong. People are trapped in bad systems and when you give
4 them the kind of tools that I'm describing-- because the nature of human
5 existence is innovation (even if it's just local in their family)-- people are
6 remarkably clever. There are very, very few bad eggs. That's called
7 reciprocal altruism in philosophy. So I would say that these transitions
8 are difficult, but I'm very optimistic about it.
9

10 MR. ROSEN: Yes, ma'am.
11

12 PARTICIPANT: (inaudible)
13

14 MR. SCHMIDT: So Google has been careful not to take
15 too strong a position on this. So let me give you my personal answer. I
16 am very worried that additional regulation will slow things down. And I
17 don't understand the legal argument of Title 1, Title 2, although it's been
18 explained to me five times by lawyers, but it has to do with who has the
19 force of law.
20

21 So a better outcome would not be Title 2, but come up with other
22 regulatory mechanisms that were lighter, that would achieve this. Part
23 of the problem with this debate is what's the current harm? And you
24 don't want to regulate ahead of a problem. You want to regulate when
25 you have the problem because premature regulation then drives
26 everybody crazy. It cuts down investment.
27

28 Here's my answer on this. And my general answer is the government
29 should do everything it can to get our citizens connected with greater
30 bandwidth. The best way to do that is tight and hard competition. If you
31 don't have a competitive choice, for example, in my home in New York, I
32 have a choice between Fios, from Verizon, and Time Warner Cable. You
33 may or may not have that here in D.C. They compete with each other.
34 They're brutal competitors, right? I've switched between them. I can tell
35 you all about them. That's called competition. That keeps them honest.
36

37 So every barrier entry to a competitor should be removed by regulation
38 and let the market fund this. You're building the super highways of the
39 sky, whatever metaphor you want. There's huge money to be made.
40 There's huge capital coming in and I worry that excessive regulation
41 would slow that down.
42

43 MR. ROSEN: Yes, sir.
44

45 PARTICIPANT: Everything Google does relies on
46 electricity, doesn't it?

1
2 MR. SCHMIDT: Yes. We love electricity.
3
4 PARTICIPANT: And you're quite right about where is
5 the (inaudible). My question is what are you doing, or what is anybody
6 doing, about developing batteries that would -- don't last four hours for
7 this one, and eight hours, but they last a week?
8
9 MR. SCHMIDT: There are two solutions -- the question
10 was what are we doing about batteries and lasting a week and so forth.
11 About your smart phone. The number one consumer of power in your
12 smart phone is the screen. The number two is the wireless network. So
13 more power efficient screens and more power efficient wireless
14 networks are the biggest contributors to battery life. It turns out it's not
15 a better battery, but a less -- but less demand, if you will, and that's
16 where we're going.
17
18 There are ten or so different ways of taking lithium batteries and making
19 them much longer lived and those are all coming. What's interesting is
20 there's a looming shortage of lithium because lithium is so useful and it's
21 largely mined in a country in South America, it's incredibly useful for
22 electric cars which is something we haven't talked about, but will be
23 very, very voluminous relatively soon.
24
25 MR. ROSEN: Yes, ma'am, in the back.
26
27 PARTICIPANT: (inaudible)
28
29 MR. SCHMIDT: I've actually read that and I'm alarmed
30 that people have decided that science isn't correct. So to review science,
31 science is an iterative process of proving and reproving and reproving
32 and reproving. So for example, climate change is clearly real, although
33 there are debates as to the rate and how to address it. Right? I can go
34 on. There is sort of anti-intellectualism that is implied by that amount of
35 political speech. It's very damaging to the future of our country.
36
37 Now there are plenty of debates within science, right, but let's
38 acknowledge that science is correct. If we have to go back to the birds
39 and the bees, evolution and so forth, then we just have a different
40 conversation. We're not going to make any progress, but if you really
41 believe that, then you probably shouldn't listen to the weather report,
42 because that's based on projections. You probably shouldn't fly in
43 airplanes because that involves all sorts of physics. And you probably
44 shouldn't take any drugs because they might harm you.
45
46 MR. ROSEN: We have time for one last question. Yes,

1 ma'am.

2

3 PARTICIPANT: (inaudible) What would it take for
4 Google to take the more (inaudible) role (inaudible).

5

6 MR. SCHMIDT: So I personally have a large foundation
7 that's doing work in this area and Google has -- this is sort of a long
8 answer and a short answer. I'll spare you the long answer.

9

10 One of the more interesting things that I've discovered recently is that
11 the cost of a low carbon energy environment over the next 40 years is
12 roughly the same as the cost of a high energy carbon environment.
13 Interesting.

14

15 The reason is that these plants have to get replaced and technology
16 moves forward. We're at a situation now where solar and basically wind
17 and certain forms of solar, PV solar, are near price parity with their --
18 they're effectively cheaper than coal, roughly equal to coal and roughly
19 equal to natural gas. There are issues because they are intermittent,
20 which is a technical problem which we can understand. There are
21 solutions there involving batteries and redistribution and internet of
22 energies and so forth and so on, but over a 40-year period you have a
23 choice. Do you want to build a high carbon future or a low carbon
24 future? I think the answer is pretty obvious, based on the science.

25

26 There are a lot of people working on sustainability and trying to study
27 how real sustainability works. So the recycling of materials and things
28 like this, and I funded some initiatives in that area personally. So I think
29 there's every reason to believe that there are going to be a lot more
30 people in the world. Our carbon intensity is going to go down, not up
31 over our lifetimes as a result of these changes and that will be okay.

32

33 It requires action. So my plea to you is many of these problems are
34 political in nature. These are problems that are not unsolved. There are
35 plenty of problems in my world that are unsolved, like we still don't
36 know how to answer the hard questions in AI and things like that. But
37 we do actually know how to organize more sustainable systems, making
38 things more energy efficient, making the world a better place from an
39 energy perspective. Why don't we just do that?

40

41 PARTICIPANT: Hear, hear.

42

43 MR. ROSEN: Eric, a round of applause.
44 (Applause.)

45 MR. ROSEN: Eric Schmidt, you are not a lawyer, but
46 here in the Supreme Court you have proved yourself extraordinarily

1 thoughtful about the constitutional dimensions of the remarkable
2 technological innovations over which you are presiding at Google.

3
4 MR. SCHMIDT: Thank you. Thank you. That's very kind
5 of you. And I want to thank Justice Ginsburg and all of you who put this
6 together. This kind of a conversation is both a great honor to me, but I
7 think it's important. If you look at the history of America and you study
8 the great debates, this is another one of the great debates, not just here,
9 but all around the world. Let's get it right.

10
11 MR. ROSEN: In that spirit, I appoint you an honorable
12 fellow of the National Constitution Center.

13
14 MR. SCHMIDT: Thank you very much.

15
16 MR. ROSEN: Please join me. Thank you, Eric Schmidt.

17
18 MR. SCHMIDT: Thank you.

19
20 MR. SALYER: I'm Stephen Salyer, president of the
21 Salzburg Global Seminar. I wanted to thank all of you for coming and
22 being a part of this conversation tonight. Special thanks to Justice
23 Ginsburg and our speaker and moderator for a really wonderful evening
24 here at the Court.

25
26 Second, I want to thank Tom Mansbach and Bailey Morris-Eck who have
27 been real leaders in developing the Cutler Center; a special salute to Tom
28 who has helped us support this event and the reception that follows.

29
30 As many of you know, the Cutler Center offers opportunities for senior
31 judges and lawyers, rising young lawyers, and even those like Eric
32 Schmidt who didn't obtain law degrees, to explore leading edge issues in
33 international and private law.

34
35 In February, ten of the nation's law schools will each send to Washington
36 five of their top students who will present papers as part of a two-day
37 program at the United States Institute for Peace. In 2016, we're laying
38 groundwork for expanding this program to include a week-long program
39 in Salzburg which will build on the programs that Lloyd Cutler used to
40 convene, where he brought very senior players from across the world
41 together with the rising stars who are going to shape the future. I think
42 we've probably got some Cutler Fellows sprinkled through the crowd
43 tonight from our last two years. We are excited to welcome to
44 Washington in February the next 50 Cutler Fellows and building them
45 into a worldwide network for very positive change.

46
47 For those of you who are free tomorrow morning or looking for

1 something to do between 9 and 10:30 in the morning, we'll be over at
2 National Public Radio, where we will continue part of this conversation,
3 but with a little different cast, the question: "Is there a right to be
4 forgotten?" Adam Liptak of the New York Times will be our moderator
5 for that conversation. You are all invited if you'd like to join us.
6
7 As always, we rely on the friends of the Salzburg Global Seminar to make
8 these programs possible and to spread the word about our unique work.
9 We thank all of you for coming tonight and invite you now to move next
10 door for a reception where we can continue to build this wonderful
11 global network of the Salzburg fellowship. Thank you again.

