

THE PHILOSOPHICAL SOCIETY OF TEXAS FOR THE COLLECTION AND DIFFUSION OF KNOWLEDGE *was founded December 5, 1837, in the Capitol of the Republic of Texas at Houston* by MIRABEAU B. LAMAR, ASHBEL SMITH, THOMAS J. RUSK, WILLIAM H. WHARTON, JOSEPH ROWE, ANGUS McNEILL, AUGUSTUS C. ALLEN, GEORGE W. BONNELL, JOSEPH BAKER, PATRICK C. JACK, W. FAIRFAX GRAY, JOHN A. WHARTON, DAVID S. KAUFMAN, JAMES COLLINSWORTH, ANSON JONES, LITTLETON FOWLER, A. C. HORTON, I. W. BURTON, EDWARD T. BRANCH, HENRY SMITH, HUGH McLEOD, THOMAS JEFFERSON CHAMBERS, SAM HOUSTON, R. A. IRION, DAVID G. BURNET, and JOHN BIRDSALL.

The Society was incorporated as a non-profit, educational institution on January 18, 1936, by George Waverly Briggs, James Quayle Dealey, Herbert Pickens Gambrell, Samuel Wood Geiser, Lucius Mirabeau Lamar III, Umphrey Lee, Charles Shirley Potts, William Alexander Rhea, Ira Kendrick Stephens, and William Embrey Wrather. On December 5, 1936, formal reorganization was completed.

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CONTENTS

Stewardship:

The Careful and Responsible Management of Things Entrusted to One's Care

THE PHILOSOPHICAL SOCIETY OF TEXAS 2010 ANNUAL MEETING	5
OPENING REMARKS AND INTRODUCTION	7
J. Mark McLaughlin, President	
STEWARDSHIP OF RESOURCES: PART ONE	9
<i>Moderated by</i> R. James George, George Brothers Kincaid & Horton LLP	
THE PAST AS A NATURAL RESOURCE, AND HISTORIANS AS ITS STEWARDS	11
H. W. Brands, Jack S. Blanton Sr. Chair, Department of History, College of Liberal Arts, The University of Texas at Austin	
RESTORATION OF THE LAND: BAMBERGER RANCH	21
J. David Bamberger, Land Steward and Board President of Selah, Bamberger Ranch Preserve	
STEWARDSHIP OF THE FUTURE: STEWARDSHIP OF OUR PATRIMONY	43
John Cornyn, Senator, United States Senate	
STEWARDSHIP OF THE EARTH: GLOBAL WARMING AND MAN'S EFFECT ON IT—OR NOT	61
<i>Introduced and Moderated by</i> Mary Ann Rankin, Dean, College of Natural Sciences, The University of Texas at Austin	
HOW TO DEAL WITH THE SCIENCE	65
Richard Lindzen, Professor of Meteorology, Massachusetts Institute of Technology	
HUMANS ARE THE CAUSE OF GLOBAL WARMING	78
Ray Orbach, Former Undersecretary, U.S. Department of Energy	
STEWARDSHIP OF FAMILY SUCCESSION	
POWELL FAMILY RANCHING BUSINESS	90
James L. Powell, Powell Ranches and Powell Herefolds, San Angelo	
THE KEMPNER FAMILY IN GALVESTON AND IN SUGARLAND	96
Harris L. Kempner Jr., President, Kempner Capital Management, Inc.	

STEWARDSHIP OF RESOURCES: PART TWO	
STEWARDSHIP THROUGH THE EYES OF A BIRD DOG	100
Dale Rollins, Texas A&M Extension Service, San Angelo	
MEMORIALS	112
OFFICERS OF THE SOCIETY	127
PAST PRESIDENTS	128
MEETINGS	130
PREAMBLE	131
MEMBERS OF THE SOCIETY	132
IN MEMORIAM	157

The Philosophical Society of Texas

“Stewardship: The Careful and Responsible Management of Things Entrusted to One’s Care” was the theme of the 173rd anniversary meeting of the Philosophical Society. President J. Mark McLaughlin organized an impressive group of speakers and moderators to discuss the office, duties, and obligations of stewards. R. James George, Jr., of Austin served as moderator. The speakers examined issues ranging from the stewardship of the past, the future, resources, and the succession of family business. The meeting was held at the San Angelo McNease Convention Center and Marriott SpringHill Suites in San Angelo, Texas. Almost 200 Society members and guests were in attendance.

The meeting began on Friday December 3, 2010, with an optional afternoon tour of San Angelo. Participants experienced legendary West Texas hospitality as they rode the historic San Angelo Trolley to lunch at Miss Hattie’s Café and Saloon, followed by a tour of Legend Jewelers, M.L. Leddy’s Boots and Saddlery, Eggemeyer’s General Store, Cactus Book Shop, Santa Fe Railroad Station, and Fort Concho. President McLaughlin officially welcomed members and guests to the 2010 meeting at the reception and dinner held that evening at the Cactus Hotel. He introduced the eleven new members and presented them with their certificates of membership. The new members were: Neils Agather, Daniel H. Branch, J. Kent Calder, Kirk A. Calhoun, Bonnie A. Campbell, Light T. Cummins, David E. Daniel, Randy L. Diehl, Scott M. Kleberg, Kenneth W. Starr, and Stephen L. Tatum. Following dinner, Virginia Noelke related a brief history of the Cactus Hotel.

On Saturday morning, the meeting continued at the San Angelo Convention and Conference Center as President McLaughlin introduced the meeting topic and the meeting moderator, R. James George, who then led the morning sessions. As lunch concluded, Lonny Taylor presented the 2010 Award of Merit to Emilio Zamora for his book, *Claiming Rights and Righting Wrongs in Texas: Mexican Workers and Job Politics During World War II*. The program continued with the afternoon sessions, and the day’s activities ended with dinner in San Angelo Museum of Fine Art interspersed with Museum gallery tours.

The annual business meeting was held on Sunday morning. The names of the recently deceased Society members were read: Liz S. Carpenter, Jenkins Garrett, William H. Goetzmann, William E. Gordon, George F. Hamm, Thomas N. James, Peter C. Marzio, and former staff member Evelyn Stehling. Secretary Ann Hamilton announced Society membership stood at 201 active members, 62 associate members, and 78 emeritus members for a total of 341 members. Officers elected for the year 2011-2012 were: Frances B. Vick, president; Jon

H. Fleming, first vice-president; Ron Tyler, second vice-president; Harris L. Kempner Jr., treasurer; Ann T. Hamilton, secretary. Because the Society changed the the dates of future annual meetings from the first weekend in December to a weekend in February, the meeting marked the last December meeting. The next meeting would be held fourteen months later. President McLaughlin turned the gavel over to incoming President Frances B. Vick who adjourned the meeting until February 3–5, 2012, in Dallas.

INTRODUCTORY REMARKS

J. MARK MCLAUGHLIN

MR. MCLAUGHLIN: Thank you all for being here, for being in San Angelo. I want to tell you what a great privilege it is to have such a distinguished group here in our fair city. I hope you enjoy your stay. You're certainly welcome here, and we're very glad to have you. I hope you will extend your visit, as you are able.

We want to begin with a program this morning, and I hope you will be stimulated to thought, that you know this is participatory. I hope you will have an opportunity to speak to the speakers and ask them to enlarge on certain points they may make.

Our theme today, as you know, is stewardship, and to keep this going and to be our master of ceremonies, I've asked Jim George, a distinguished scholar and lawyer from Austin, if he would, please, be the moderator and keep this moving properly.

For housekeeping chores I'll tell you, the coffee room will be open during the breaks and I hope you will use that. We will have lunch in Ballroom E at the appropriate hour. I hope you enjoy the fellowship and I hope you enjoy the program, I hope you're stimulated and I hope you're satisfied with our arrangements here in San Angelo. With that I'm going to turn the program over to Mr. Jim George of Austin.

STEWARDSHIP OF RESOURCES: PART ONE

JAMES GEORGE, JR.

Thank you, Mark. We're going to do this in a couple of segments, two in the morning and two in the afternoon, and the topic is stewardship. Now stewardship is an interesting idea that we have lots of different ideas about what we're talking about, so I'm going to try to define something as I understood it.

In about 1958, when I was 14 years old, Harry Bamberger, who was the Methodist minister at the First Methodist Church in Brady, was teaching us something about what he wanted our religion to be, and he started talking about a part of the New Testament, Matthew 25, where Jesus is supposed to be sitting on the Mount of Olives talking to his disciples. And he describes an event where a man is going to leave his home for an extended period of time. And he entrusts his earthly goods to his employees, or servants. And he gives them coins, or symbols of wealth in those times called talents, and he gives one, five talents; one, two talents; and one, one talent. And Jesus says that he gave them to them according to their ability, suggesting that those of us who have more ability have more responsibility. When the fellow comes back from his trip, the person who got the five had turned it into ten, and the person who got the two had turned it into four, and the person who got the one had buried it in the ground and had just done nothing but to leave it where it was. And he criticized that fellow as not being—I assume it's a fellow, that's what it suggested in those days—that he was not a good and faithful servant because he had not used the opportunity given him fully.

One of the problems as a lawyer is I'm always being a steward because I always have clients. And I have a pretty easy job, because what my job is, to be a good steward or fiduciary to those clients, because the clients give me instructions on what they want done. And that makes life pretty easy.

One of the problems with stewardship generally, is figuring out to whom we are stewards. Who is our master in this situation? Part of our problem is the needs of the people who could be our masters are different. We have the masters of the here and now, that is, the need to make sure that people who depend upon us have what they need today. Then we have the stewards, as the steward of the future. That is we have the job of making sure that not just the people who we know and serve today have what they need, and we serve them well, but we serve that future generation, the grandchildren, and the grandchildren's grandchildren in America.

America has had a history of exploitation of our natural resources and our opportunities. Mark and the people who I grew up with in Brady and the people who grew up in this part of the world—all of us had grandfathers or people who would tell stories of coming into this country in the 1870s and 1880s and the grass was up to the belly of a horse and the streams ran clear and there weren't any cedar trees and there weren't any mesquite trees. As Mark has said, the people who came with their cattle thought they were in the cattle business, not the land business. That is they used the cattle to harvest an excess amount of the resources and then moved on because there was always another opportunity. We had the cotton empires of the same effort; we have had exploitation of our carbon resources, oil, gas, coal, other things that we have taken an opportunity, and we exploited them for the here and now. One of the issues that we face now is that there are no more frontiers. There's no more. We can't go and find some other place that we can replace what we screwed up yesterday. We have to live, not only ourselves, but the future generations, with what is here now.

And we're going to talk today about stewardship; the trouble of defining it in terms of time and place, who you are responsible for and to, and that's very difficult. Senator Cornyn has a particularly difficult problem, he's a steward for the people who elect him, for the Republican Party, and for the future of America, and sometimes those interests, immediate interests, are different, and that makes life hard. It makes complicated and difficult decisions. At some level, all of us face the same problem that John Cornyn has, because we have to figure out how we're going to serve that master that we need to serve, and do we always look to the future.

THE PAST AS A NATURAL RESOURCE, AND HISTORIANS AS ITS STEWARDS

H. W. BRANDS

MR. GEORGE: Our first panel member is Bill Brands. He is the Dickson Allen Anderson Centennial Professor of History and Government in the Department of History of the College of Liberal Arts at The University of Texas at Austin. You probably have read some of the books he's written. He's one of the most prolific historians and writers. He not only is a great scholar and a great teacher, he has written, as I last counted, 22 books, and some of them are well-known. Some are: *The First American*, on Benjamin Franklin; *Traitor to His Class*, on Franklin Roosevelt; *T. R.: The Last Romantic*, on Theodore Roosevelt. His works have twice been selected as finalists for the Pulitzer Prize. He is an observer of the history of America, and his topic is going to be the Past as a Natural Resource and Historians as Stewards. Bill Brands.

DR. BRANDS: Thank you, Jim. I'm delighted to be here. This is a very august group and it's quite an honor. I was asked to speak on this general topic of stewardship, and I knew that the general theme of the weekend was going to be stewardship of natural resources, and I was trying to figure out what in the world I could say on that subject, because natural resources isn't exactly my field.

But then I thought, well, what is my field? My field is memory, and it's history, and I've been teaching history for 30 years, and I've been writing about it for nearly as long. So I thought, okay, well, this is what I'm called upon to be a steward of. I'm going to get into some theoretical stuff, and I was a little bit reluctant to do that, but thought, well, this is the Philosophical Society, so you can deal with it.

But I'm going to start with a story, actually a couple of stories, and this relates to my introduction to Texas. I came to Texas in 1981 to live. I had visited before, but I came to Texas in 1981 to study, graduate study in history at the University of Texas. And I knew as much—or as little—about Texas history as most non-Texans. Certainly I wasn't here for seventh grade, so I didn't take the famous seventh grade Texas history class. I did know sort of where Texas fit into the broader scheme of American history. I knew that, but there was a

part of it that didn't quite fit. Just out of curiosity, how many of you are native Texans?

Okay. So I'm going to tell you how it looks from the rest of the country.

And you might appreciate the puzzle that I had, because one of the things I tell my students when they're studying, when they're writing for me, my undergraduates, my graduate students, I tell them that every historical inquiry has to begin with a puzzle. Everything that you write, there has to be a riddle, a question, something that you want to answer, because if it's not there, the curiosity isn't going to be there either. So here's the puzzle that I had. I knew that Texas had been settled by Anglos in the early 1820s. I knew that Stephen Austin had brought the famous 300 families to settle in Texas in the early 1820s. And I knew that this had occurred with the permission of the Mexican government. Now, I also knew what happened after that. I knew that the Americans had come, and they kept coming, and they kept coming until by the mid-1830s, the Americans in Texas far outnumbered the Mexicans in Texas. And then it wasn't such a surprise at that point, at least for me looking from the outside, that the Americans in Texas, Americans of that era, being a famous, or notoriously grasping bunch, they would decide that they were going to grasp Texas, and grasp Texas away from Mexico, and, with a delay, attach it to the United States.

So that story was sort of well understood, but there was a puzzle in the middle of it. And the puzzle was, when the Mexican government authorized Austin to bring in those colonists, what in the world were the Mexican officials thinking?

Didn't they realize how this was going to turn out? So I came to Texas and I was thinking about it, because I didn't come to study Texas history, I came to study the history of American foreign policy. But having lived in Texas a while, I became more aware of the, well, the complexities in Texas history, the richness of Texas history, and I gradually began to think, well, maybe I should try writing something about Texas history.

But, meanwhile, there was in the back of my head this puzzle, what were the Mexican officials thinking in inviting Austin and his colonists to come? Didn't they see how things were going to turn out?

Okay. So I didn't write anything on Texas history until the beginning of, well, actually it was shortly after the 2000 election, and then actually after 9/11. I had contracted with my publisher, a New York publisher, to write a biography of Andrew Jackson. And I had started in on Jackson when my publisher, a New York guy, and my editor, another New York guy, said, Bill, why don't you hold off on Jackson briefly and could you write something on the history of Texas? Now, my first thought was, what are they thinking?

But I knew what they were thinking. Well, the reason I asked that is, I had been long-tempted to write on Texas history, but I didn't want to write simply for a Texas audience. I consider myself an American historian, a historian of the United States, and I wanted to tell the Texas story in the context of American history. But I know that if you write something that sounds like a state history, or regional history, it often gets pigeon-holed that way. And I assumed that there would be an audience in Texas for what I might write, but an audience

elsewhere? I thought it was very significant that these two New York guys were suggesting that I write about Texas.

Now this was, of course in a moment when we had a Texas president who, after 9/11, was riding high and seemed like somebody that people would want to read about, or at least the place that he came from would be something that people would want to read about. I said, sure, I'll be happy to write this. So we signed a contract, and I began.

And I started doing the research. Well, I realized actually that I had been doing the research for a while, but just not realizing it. At the time, my first permanent teaching gig in Texas was at Texas A&M. So I taught at Texas A&M for 17 years. But meanwhile, for family reasons, I was living in Austin. And so twice a week I would make the drive through Austin to College Station. And I didn't realize at first what a historic drive I was making. I gradually realized that Highway 21 is the old Camino Real, and that everybody who came into Texas, during the Austin era, during the 1820s and 1830s, everybody who came from Louisiana and from the eastern part of the United States came along that same road.

So I started doing the formal research for the book by reading Stephen Austin's journal, the journal that he kept on his first trip to Texas. Now, by this time I knew that Stephen Austin was something of a reluctant colonist to Texas. His father, Moses, had had the idea of planting the American colony in Texas. The reason Moses did it was because he was very deeply in debt and the only way he could figure out to dig himself out of debt was to hatch this scheme for colonizing Texas, and he would take a cut off of the colonization process. He was the one who initially got the permission, but he died before he was able to carry it out. And the death bed request that he left to his son, Stephen, was to carry out the Texas project. Well, Stephen Austin, till this point, had wanted to have nothing to do with it. He thought it was a hare-brained scheme. And he was off in New Orleans studying to become a lawyer, a much more respectable occupation, or so he thought.

He got the letter from his mother saying that your father has died and as his last request he wants you to take up the Texas project. So there was that filial part of Stephen Austin that made him think, okay, I should probably do this.

But that wasn't the clincher. The clincher was that, especially in those, more than these days, just as you could inherit wealth, you could inherit debt. And Stephen Austin recognized that, okay, now I'm deeply in debt, and he thought, he considered his alternatives. Oh, and that was a time of course when Americans took debt quite seriously. Moses Austin had spent time in debtor's prison. And Stephen Austin considering his possible paths, said to himself, let's see, prison, Texas, prison. It took him a while, but he decided on Texas.

And off he went. And so I was reading the journal that he wrote of his trip to Texas, his first introduction to Texas. And I was struck by one word, an adjective that kept popping up in his journal, and the adjective was "beautiful." "This is the most beautiful country I've ever seen," "these prairies are beautiful, "the streams are as beautiful as one can imagine." Now when I read that, I realized for about 10 years I'd been driving along that same route that Stephen

Austin was describing in his journal. And I could tell from the looks of the land, from what I knew about the history of the land, that I was seeing pretty much what Stephen Austin had been seeing.

The land had not changed a whole lot in the time between the early 1820s and roughly 2000. It was still the rolling prairie. This is the land between, well, basically between the Colorado River and the Brazos River. And it was still rolling prairie with oak groves along the stream bottoms, and where there had been buffalo in Austin's day, there were cattle this day. And I thought, beautiful? I might have said scenic, pleasant, nice, but beautiful?

I grew up in Oregon, and Oregonians pride themselves on thinking they know what constitutes natural beauty. Every other, maybe every Oregon household has on their coffee table a big picture book that has snow-covered Mt. Hood on the cover, or the rugged Oregon coast, or Crater Lake in winter, or something like that. So we Oregonians like to think we know natural beauty. And this, what I was seeing beauty? I asked myself, what was Stephen Austin thinking?

Okay. While I was writing the book, friends would say, what are you working on? I'd say, I'm working on a book about the Texas Revolution. And this became immediately, in their minds, my book about the Alamo. And I would say, well, it's more than the Alamo, but I understood what they were talking about, because the battle of the Alamo really is the dramatic centerpiece of the Texas Revolution. And I became very intrigued by this. I knew that I was writing against the background of all sorts of people who had told the story of the battle of the Alamo. And it's been told of course in nonfiction innumerable times, it's been told in fiction very well, it's been told in movies, it's been told in poetry, it's been told in song. And so there were a lot of people who said, Well, what can you say that's new? And I had to think about that a little bit, and I wasn't sure exactly what I was going to say that was new. In fact, I wasn't even sure it was necessary to say something that was new, because I became aware of what it is that pulls us to the story of the Alamo. And it is, I think, precisely this, that we know before those defenders of the Alamo know, that they're not going to get out of there alive. We know they're all going to die.

Now of course we have historical hindsight in this, we know how it turns out. But we also become aware at some point between the time when Santa Ana marches his army across the southwestern horizon and it just keeps coming and coming and coming, and we can be with William Travis, David Crockett, and Bowie and the others who watch the army keep coming and coming, they realize at some point between then and the day of the battle, March 6, 1836, that they're not going to get out of there alive.

Now I think the reason that it so grips us is that whether we're conscious of it or not, we all know we're not going to get out of this life alive either. And we want to see how people, in this case how these men, are dealing with their impending death. In other words, what we want to know is what were they thinking?

So, I've given you three illustrations of something that I have learned, I con-

cluded, over the course of my career so far teaching and writing history. And that is, there is one central question of history, and the central question, if you want to understand the past, yes, you can talk about the facts and you can write down the facts, and those are not unimportant, but the central question for historians is what were they thinking.

If you want to know about the past, you need to get inside the heads of the people who were there. You have to figure out what the world looked like to them. Now, this requires something that sounds mildly heretical to students of history or to historians. If you really want to get inside the heads of people at the time they lived, you have to forget everything that happened after that particular moment.

You have to forget for example that the defenders of the Alamo, at least when they go there, they don't know they're going to die. You know, nobody went to the Alamo to die, they all went to win. They thought they were going to win until gradually they realized they were outnumbered and they weren't going to get any reinforcements. Then they said, okay, we're not going to make it.

But when I was trying to answer that question of what was the Mexican government thinking in inviting the Americans in, I had to forget that the United States turned out to be a continental power. The United States turned out, in fact, to be the greatest power in world history.

If I look back on that moment in 1820 and 1821, knowing that the United States is going to take over most of the central part of North America, and it's going to have power that expands all around the rest of the world, then I cannot get back in the minds of those Mexican officials who made this, as it turns out, reasonable decision to invite the Americans in. Because if you were looking at the United States in 1821, you didn't see a continental power. You saw a collection of states in the eastern half of the middle part of North America that were having serious problems holding their own act together. Smart money in the world, it turned out to be wrong money, but smart money in the world bet that this American experiment in democracy was going to self-destruct. And, in fact, it basically did in 1860 and 1861. It was held together through military force. That's not the way democracy is supposed to operate. Democracy is supposed to operate through the ballot box.

But anyway, if you didn't know all that stuff, if you were looking simply from the standpoint of 1821, you wouldn't have said, Oh, we have to worry about the Americans seizing away Texas. In fact, there was something; this is something that do you know. You were a student, you're Texans, you took that seventh grade Texas history class. Do you know the answer to the question of what the Mexican government was thinking? Some of you are nodding, but not all of you. Okay. Well, then I will proceed to enlighten you, as this outsider. There is room for correction if I get it wrong, for those of you who are nodding.

Anyway, when I was working on the book, I made a map of Texas, and I put it on my wall. And every day I would look at this map of Texas. And it was a conceptual map as well as a geographical map. And the conceptual map consisted of three arrows that were pointing to Texas. These were the arrows of

the peoples who were coming to Texas, the ones who wanted to claim Texas, because Texas at this time was sparsely occupied. There really weren't very many people here. And this was okay, I'll get there.

There was a long skinny arrow, and if I can do it from your side, a long skinny arrow coming up from the southwest. The arrow originated in central Mexico and it was long because it's a long way from Mexico City basically to Texas. And it was skinny because very few Mexicans were willing to colonize Texas. There was a lot of more attractive property closer to home, so to speak. And as of 1820, there were no more than 4,000 to 5,000 Mexicans living in what would become the state of Texas.

So that was one arrow. There was another arrow that was coming down from the northeast, and this was a fat arrow. It consisted of American migrations west. Now this arrow stopped short of Texas, or at least it was supposed to stop short of Texas. There had been some illegal immigration into Texas, but not much. And it stopped roughly in Louisiana. Now this was a fat arrow because there were lots of Americans moving west. But it hadn't quite got to Texas yet, at least officially or legally.

And that was the balance of power. And someone might have seen that, well, wait a minute, the fat arrow is going to outweigh, overpower the skinny arrow, except and this is what doesn't make it in to the US history textbooks, and this is why I was really puzzled, because skinny arrow, fat arrow, skinny arrow won't let the fat arrow in. But there was another arrow. And the other, now I suppose to San Angelo, maybe you're especially attuned to the other arrow. You know what the other arrow was? It was coming down from the northwest. And this was the arrow of the Comanche and the Mexican government, and this arrow was deep into the heart of Texas at this point, and the Mexican government, assessing the situation in 1821, figured there is a greater chance that we are going to lose Texas to the Comanche than it is to lose Texas to the Americans. At least it's more likely to happen sooner.

So part of the deal that the Mexican government made with Stephen Austin was, you can bring in your colonist, but you have to agree to act as a shield, a buffer against the Indian invasion. Now Stephen Austin didn't know anything about Comanches. Okay. Shoot, we fought Indians in the East. They didn't know what they were getting into. But anyway, so this was the answer to that question of what were they thinking in that case.

Now, I could tell you, should I tell you the answer to what Stephen Austin was thinking when he described Texas as beautiful? I might. No, I'll hold that off. But because I need to elevate this to the theoretical level now having to do with this question of stewardship, what we historians do. We try to recapture the past, we try to recreate the past for, well, for the present and for the future. It's especially a challenge, I think, in the United States, for this reason. That the United States, America has been probably almost more than any other country, throughout its entire history, the country of the future. Americans look relentlessly to the future rather than to the past.

I think this is one of the things that explain what Jim was talking about. This idea that the resources are here for the using here and now, and just get on with

it because if you don't, somebody else will, and there will always be another frontier, I'm going to move on to the future. Other countries, they've been more constrained geographically, who've been required to live on the resources in one place for a much longer period of time, tend to have a greater sense of history. But anyway, this is what those of us in the history game have to deal with.

I teach at the University of Texas, and I teach 19-year-olds and 20-year-olds and 22-year-olds. And I will tell you that, as interesting as I make my classes, I like to think I make them interesting, teaching history to young people is really trying to push a rock uphill, because you can remember when you were 19. If you recall when you were 19 you weren't thinking backwards, you were thinking forwards. And, you know, I'm not going to venture to guess the average age of the group in here, but when you reach a certain age, you're more aware that there's a lot of interesting stuff in the rearview mirror. The rearview mirror gets bigger and the windshield seems to get a little bit smaller. So you do pay more attention, as you get some history then you become attuned to the history of your country.

So this question of how to get at the past, how to re-create the mind of the past. One of the ways we do it, the basic way we historians do it is we read old letters and diaries and journals and anything we can get our hands on from the time. I read Stephen Austin's journal. So that part isn't particularly surprising or, shall I say, theoretically interesting. We do all this stuff. But there's something else that happens, and it requires almost, I could say, a leap of faith, or maybe some kind of theory of psychology, maybe theory of forensic psychology, theory of historical psychology, and it's this, when Stephen Austin writes in his journal, This is the most beautiful land that I have ever seen, when he uses the word beautiful, does it mean the same thing as it would if I used the word beautiful to describe land today? And the answer is, no.

Part of it is a matter of context, part is a matter of perspective. But there's something else that's deeper than this, and I'll get to the context and the perspective, but there's something deeper, and that is, and it's a question I don't have an answer to. This is the Philosophical Society, we should discuss this. I hope you will. And that is, is human nature stable over time, if something happens. I'll give you an example. Benjamin Franklin, whom I wrote about in an earlier time. Benjamin Franklin lost a son, when the child was four years old. He was carried off by smallpox. And Benjamin Franklin quite clearly mourned the loss of his son, and he used to keep a mental score card in the following sense. Francis was his name, he called him Frankie, and Franklin kept track of how old Frankie would be two years after he died, six years after he died. And when he saw 10-year-old boys playing in the streets of Philadelphia when Frankie would have been 10, he would imagine what Frankie would have been like. So this is the memory he kept.

But my question for Franklin basically, my question to you is, was the loss of a child at that age as painful as the loss of a four-year-old child would be today? And I put the question out there, and I'm not presupposing any kind of answer. I will comment that childhood mortality was much greater in the 18th century in America than it is today. It's very rare for four-year-old children to die, thank-

fully, these days, at least in the United States. It wasn't rare at all in 18th-century Philadelphia. So does that fact change Benjamin Franklin's assessment? When Benjamin Franklin is grieved or when Andrew Jackson loses, do they experience less loss? Andrew Jackson was one part of the one of the great love stories of American history.

Andrew and Rachel Jackson had a marriage that began under a cloud because she was still legally married to a former husband, who had abandoned her. She didn't know if he was alive or dead or if he had divorced her or not. It was very complicated. But she and Andrew Jackson got married. They probably knew that she wasn't legally divorced yet, but later well, at the time it happened Andrew Jackson had no idea he would ever become famous, and this would become an issue. But it did become an issue, and so all of their friends perjured themselves to cover the story. But it wouldn't die. And, in fact, when Jackson was running for president in 1828, his opponents conducted the most slanderous, the most scandalous campaign of attack. Not so much on Jackson, but upon Rachel, to the point where Rachel had a nervous breakdown and then a physical breakdown and died as a result of this. Now, Andrew Jackson, needless to say, was distraught by this. In fact, he threw himself down in the mud beside her grave at the Hermitage. This was between his election and his inauguration, and he almost didn't get up. His friends had to pick him up and clean him off. He was so depressed, so despondent. But the one thing that kept him going, one thing that made him decide to go off to Washington was his determination to make his political enemies pay for what they had done to Rachel.

I mention this because this kind of thing doesn't happen, thankfully, in politics these days, not to that extent. So is it possible to understand the mind of Andrew Jackson on this? Was his reaction like anything today? I put the question out there because if you're going to write about history, especially if you're going to write biography in history, you really have to have some kind of notion, or maybe even a theory of human nature, because you have to, at some level, you have to think, how would I have responded in that circumstance, and maybe you'll allow for changes in time, maybe you'll allow for changes in perspective, but you still have to say that this person that I'm writing about, in some way, some basic way is like me.

And I don't have any firm basis for drawing that conclusion. I can't say for sure that people looked at the world the same 200 years ago as they do today. For that now, I realize that this is a problem that confounds all sorts of activities, even today. Physicians, and I'm sure there are physicians in the room who are better aware of this than I, who were trying to figure out how much something hurts. So if someone says, I have a pain in my side, and the doctor says, How much does it hurt? Well, it's really hard to know, because I can't feel that other person's pain. Bill Clinton could feel other people's pain, but most people can't feel other people's pain. And so, you know, you ask, does it hurt really bad? And you don't know if this person is a stoic, or if this person is a wimp.

These are the problems that confront those of us in the history business. We deal with them the best we can. We try to make real the history of our society so that, well, to bring it into the context of this weekend, so that we can get a sense

of where we are, what we have, what we have had, and what we're going to do with it. This business of history, and as it relates, getting particularly, to natural resources, I would contend that there is a very direct, a very fundamental connection between history and let's just say natural resources like land. And I'll give you two illustrations here.

One is really mundane. For those of you who are in the law business, if anybody buys a piece of property, you know, one of the things they do is a title search, which is nothing more than let's look at the history of who owned this and who owned this, and the way the history is defined essentially defines where the ownership is. To elevate it a little bit, do any of you know the story of Kennewick Man? Okay. Kennewick Man was this, well, these were the prehistoric remains of an individual who was discovered in southeastern Washington, near Kennewick, Washington, in the 1990s. And there had been high water; there had been a flood and so it washed away and these bones were sticking out. And the skeleton was found on an Indian reservation. I can't remember, Umatilla Indians probably. And so there was some question as to who owned the skeleton, there is a, I can't remember the name of the statute, but it basically says that any human remains found on an Indian reservation are presumed to be of that Indian tribe. The trouble with this was that this skeleton didn't look anything like any Native American skeleton. And before the lawyers could come in and suspend the investigation, enough was discovered about this skeleton that was deemed to be male to suggest that this guy was very Caucasian. And they did a radiocarbon date on it, and it showed 10,000 years ago. And nobody could figure out what was going on here. Now, this became a highly charged political question because it had been accepted, sort of as a matter of law, that the Indian tribes who controlled the reservations were presumed to be the original inhabitants of these lands, these resources, these territories. But then you get this outlier, somebody who quite clearly wasn't a member of the tribe, who seemed to have been there thousands of years before any of the tribes got there. Now, there were lawsuits and investigations were suspended; it went on forever and ever. The most recent, if I'm correct, the most recent ruling was that the anthropological investigations can continue.

Now what does this have to do with conservation of resources aside from the bones? Well, one of the things it has to do with, it gets to this question who owns, or who owned, let's put it, North America, because if there was this idea that the aboriginal people, well, that was the term that was used there, but were they really aboriginal? Were they the first ones there? In fact, if you look at the history of North America, it's very difficult to find any tribe that was in any place for very long. And so who has been managing the resources for all these years, who has ownership of the resources. It remains an open question, and it's something for historians to deal with.

I'm going to close by telling you that history is sometimes useful for relating the past. We historians are often asked to say, to comment on what history might tell us about the present or the future.

I wrote a book about Franklin Roosevelt. It came out a couple of years ago, about the time Barack Obama was elected president. And there were paral-

els and people would ask me, Okay, so what does the experience of Franklin Roosevelt in America in the 1930s, what does that experience tell us for Barack Obama and the United States today? And I would hem and haw, depending on what I thought I could get away with, I would make this or that or comment but what I can say is that historians are not really any better at predicting the future than anyone else. Now we look at the past and we do what we can with the past. So although we can't predict the future, one of the things we do is reserve the right to tell you, after the future plays out, why it had to be that way.

I can't tell you how this recession is going to turn out. And I can't tell you what the economy's going to look like in 2015. But ask me in 2020 and I will tell you not only how it turned out, but why it was inevitable that it had to turn out that way.

Thank you very much.

RESTORATION OF THE LAND: BAMBERGER RANCH

J. DAVID BAMBERGER

MR. GEORGE: David Bamberger is the Land Steward and President of Bamberger Ranch Preserve. Selah, Bamberger Ranch Preserve is a 5,500 acre ranch that has been described as the largest habitat restoration project on private land in Texas. The Bamberger Ranch was purchased in 1969 with the specific purpose of restoring habitat. It is a working ranch and nature preserve with every management decision made by first asking: "What's best for Mother Nature?" Priorities lean 51 percent to preserve nature with 49 percent to use the ranch as an educational tool. Educational and interpretive services as well as transportation are provided by ranch staff.

In 2002 the foundation, the Bamberger Ranch Preserve was established so that all that has been accomplished at Selah, Bamberger Ranch Preserve will go on in perpetuity.

MR. BAMBERGER: Thank you. I'm a little short on the latest high tech stuff here, I'm going to have to work this computer, and I don't know computers. I was thinking about that as I had my back to the crowd, and I didn't see how many in this room were Native Texans. But then I listened to the presentation,

I



the wonderful history, and I just thought that if there had been a back door in the Alamo, there wouldn't have been a Texas if everybody had gotten out.

I feel really honored to be able to speak to a group like you. And I was a little nervous about it until last night and all the excitement. You people jump around like teenagers.

So anyway I'm proud to be here, and I hope that you will learn, appreciate the presentation I'd like to make. The first slide I have there is Selah. (Ill. 1)

Back when I was younger I took five years of bible study in which I studied the Old Testament. And I found this word "Selah." That's how we pronounced it then. I found it used 71 times in the Psalms. And Bible scholars believe it to be a musical term, because a psalmist is thought to be chanting or singing the messages to the people. And they believe it's a musical term that means to stop, to pause and to reflect. And I thought to myself, some day I'm going to make enough money that I can own a ranch here in Texas. And to me Selah would be like Walden was to Thoreau, a place for me to pause and reflect and think about just what is my stewardship, what's my relationship to the natural world?

So it was 41 years ago that I began my search, and I tried to find the worst piece of real estate that was out there. Now those of you who raised your hands and said you were Texans by birth, I want to tell you something, that you Texans were the worst land stewards.

There was more bad land in Texas that got abused, over-grazed, and all these other things. But anyway, I didn't want to put you down with that one, but the realtor that was showing me around, he showed me places with landing strips and tennis courts and chlorinated swimming pools and great big houses. And I said, No, no, no, you got me all wrong. I want something that's badly abused, that nobody else wants. And I quote him, he said, "Well, there's plenty of that around."

So here we go. So when I came here 41 years ago, let me tell you, habitat restoration doesn't have anything to do with building a house. It has nothing to do with restoring a house or a barn or that. It has to do with restoring Mother Nature to the fact of where it was way back when our previous speaker, the historian was studying it. Way back when Stephen F. Austin saw Texas as beautiful.

I, as well, saw that as beautiful, and I came here from Ohio in 1950 right out of the university. I came down here, was going to spend two years. And two years from 1950 to now is a long time.

You fall in love with Texas. But I fell in love with all aspects of Texas. So I'm going to proceed with that introduction factor. I usually take more time than I'm allotted here, so I'm going to have to go pretty fast with some of these slides.

This one, this would be our front gate, if you came through now. And Margaret, my wife at the time, who I buried here on the ranch a couple of years ago, she said what I'm showing you now is the I love me wall! They are just awards and things that we've earned because of our work. I really like this one, The Aldo Leopold Award, I like it better because a \$10,000 check came with it!

We get a lot of plaques, but you don't get that check very often. And Garden

Clubs of America, this was a wonderful one. They took us way back to New York, but I still prefer Texas. These are scenes that you didn't see, but now pretty soon we're going to come up and we're going to see some scenes as it was 41 years ago.

But about my life—I was born into poverty; we had no electricity or running water till I was four years old. My mother kept me and my two brothers outdoors all the time. I used to know every butterfly, every insect, every bird, every tree, every grass. There wasn't any light inside the house, so mom taught us about the natural world by keeping us outside. You see we lived among the Amish people, in the country. When I was a teenager, Mom gave me this book, *Pleasant Valley*, written by Louis Bromfield. With the gray hair I see in here, some of you might know that author. He was a Pulitzer Prize-winning novelist. And they lived in Europe 17 years where he observed the way the European people took care of land. And it was just as our historian said,

There was no more land over there, they had to take care of it, they had to think of the future generations. World War II breaks out and they say, Louis, you need to go back to the States, this war's going to get bad and you can do more for the war effort by going back to the States. He comes back to the United States and works his way into the state of Ohio, where I was from, and just 40 miles from where I was born. He's looking for his grandparent's farm, and he discovers the farm is an abandoned piece of real estate. And it's gullied, it's eroded, it's grown up with briars and brush and all kind of woody species, it's "farmed out." And as the historian said, we had so much land in this country, so what, we just moved on and plowed up some more.

2



So when I came here—and these are images—I'm going to show you the Hill Country, and the primary woody species that's a culprit in the Hill Country is the ash juniper. We all call it cedar. It's really not a cedar, but everyone refers to

it that way today. And this is the way it looked. And if you look in between you see no grasses whatsoever. I remember the realtor told me, he says, "You can take as much of this as you want." (Ill. 2)

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4



That condition is on my fence line right today. (Ill. 3) I stopped buying it at that point. This is a cedar break where it's so thick sunlight and rain-fall very rarely even get to the surface of the earth. This is where I stopped. That previous picture where I told you the realtor said, "Keep going, you can buy as much as you want," well, that's still what that situation on the right side looks like. It's worse than that today, and on my side where we've done the restoration work, it's so much better. It's so the grasses are belly up to the horse.

And this is the cedar tree that you don't cut down. (Ill. 4) Cedar is a native tree. So many people don't want to believe that, but fossil records prove it. And this is me and

one of my men trying to reach ourselves around that tree. We don't cut those down. We still have about 500 acres of cedar.

Now remember the Soil Conservation Service, which was one of the greatest government programs going, has changed dramatically in the past 30 years. But they told me, Bamberger, what you're doing here, you're going to destroy everything, it's not going to work. They said, You've got these five-inch, six to seven-inch rains that come up in the Hill Country, and it's going to wash all the soil you discovered and have loosened. It's going to wash it all away.

5



You're going to see some images here, but we discovered something that they hadn't thought of, and underneath each one of these cedar trees, at the trunk of the tree, we found as much as nine inches of soil. As we got out to the drip line, we found zero inches of soil. So when we were using the bulldozer to push some of this stuff over, the track of the dozer broke that hard crust. It spread the soil that we had discovered, the nine inches. It spread it around. And then we had to burn the trash. We don't do that anymore, but then what we did, we took a tractor, and I remember that we didn't have any of the OSHAs, or any of that stuff, so we didn't wear helmets and all the safety stuff. But I broke that piece of equipment over 100 times; we had to weld it. And you don't plow or anything on these hillsides in rock and stone, but we made what amounted to hundreds, if not thousands of little mini terraces. And then after we did that, and I want you to notice on the left and right, then we spread native grass seed. (Ill. 5)

I like to tell this story because I was pretty innocent, or green about this at the time. I went into Douglass King Seed Company in San Antonio and I laid my list down. And Mr. Williams that owned the place, he said, "Bamberger, what are you driving?" I said, "Well, I've got my pickup truck out there." He said, "Two things I want to tell you. You got to have an 18-wheeler to carry out what you're asking for. You don't understand. In order to get five PLS pounds of pure

live seed, you've got a bag that's this big, and just in the middle of the bag you're going to have the equivalent to five PLS pound. That's because of the chaff and all the things that are harvested when you try to harvest native grass seed."

And he said, "Secondly, I want to tell you something, Mr. Bamberger. It'll take me three years to gather up this much seed. But, if you've got a cattle trailer, I'll get what I can and you come on back. So in two weeks he called me. I went back down. We loaded up the cattle trailer, a 30-foot trailer; it was completely full of native grass seed. And I get back home, about three days later my phone rings. I pick up, "Bamberger Ranch," and the guy said, "We need 300 PLS pounds of yellow Indian grass, 250 PLS pounds of side oats grama." I said, "Wait, wait, wait. You got the wrong number. I'm not in the grass business." He said, "Yeah, we know that, but everywhere we went they said you bought it all." I cornered the market on native grass seed!

6



This is 18 months later on the very same spot as the previous slide. (Ill. 6) Grass, grass, grass. Grass is the greatest conservation element that exists. It'll beat dams, it'll beat burns, it beats terracing, it'll beat everything, and it won't cost the millions, the hundreds of millions and billions of dollars that our Corps of Engineers and others spend on it. Now I'm not knocking dams and all the other expensive conservation practices.

So what's the story? Now let's see if I got messed up. Okay. This is not my slide; it was given to me by the Soil Conservation people. The Hill Country, if you drive through the Hill Country, you're going to see these series of steps and risers on the hillsides. You can see from the interstate highway, you can see it everywhere. And it's going to look like a series of steps and risers that are on the hillsides. I'll show you a little more. The step, there's very little, but a little piece of limestone sticking out. And the riser has a little dirt in between it and the next step, a little soil. So here's a picture, overhead picture of our place after we did

the bulldozing, and you can see the hills. The light spots you see are the step and the dark spot is the riser. (Ill. 7)

7



So in order to get grass, you've got to rest this quite a bit and you've got to depend on all those little terraces that I made, scarifying the ground. Now, here, after the fact, you can see once again the step and riser. Where you see the grass sticking up, that's on the riser. And in between where you don't see it the limestone shelf is covered with just a few inches of a seed from Seep mully. It's not a grass that cattle like. But here's why I like it, and why you would like it too and why Mother Nature likes it, because it holds back the runoff of water. And that's the important thing. (Ill. 8)

8



9



So I like to tell about this one, too. This was a gully that was 12 to 14 foot deep. And my neighbor where I showed you all the cedar, that is still there. Over the years the rainfall coming down has carried what little precious soil he has. There were two automobile bodies in that thing, and we smashed them down with the bulldozer, and over the period of these last, well, it didn't take 41 years, it took less than 15, and that's filled completely up. That's the fence when we built it; that's the fence today. It backed up over 100 yards, 12, 14 foot of soil coming off the neighbor's land, and we had to raise the fence up. (Ill. 9)

One of the other things, this is not too good of a slide, but on your left there you see all those orange

flags. A lot of people go into restoration and maybe you don't spend a lot of money, but it does take a lot of time. And you remove some of these woody species. And, folks, I'm not here just to lay it on to cedar, there's other woody species which will always take over if you abuse the grass. But on the cedar, you got to think how thick that was in those previous images. There are literally tens of thousands, if not hundreds of thousands of those little blue berries laying there in the shade down in the mulch underneath the trees. And when you remove that cover, that little cedar berry says, Free at last. Free at last. God almighty, I'm free at last.

And represented by all of those orange flags, we discovered that for every one of those major cedar trees that we took out, 38 replaced it. And that's what those pink and orange tags you see are about. And when you first begin this process, once again, you can't sit back once you start a project—and I say to you never initiate any action that you're not prepared to sustain. I don't care if you're starting a business or starting a marriage, don't get into it if you don't intend to keep it up.

So at the beginning there's only two ways you can get rid of this. You want to put a bunch of Spanish goats on there; they'll eat it. The trouble is, they're going to eat all the good stuff you're trying to preserve as well. Or you can do it with what we call a prescribed burn. But you're not going to have a prescribed burn for the first five, six, seven years because you don't have any fuel. So the only way you can get rid of those, to my knowledge, is using loping shears. Once you own property—here you guys are all past that age—but I always have 10 or 15 pair of loping shears there, and anybody that comes up, I say, "Well, let's take a

walk, I'll show you the place," and I hand them a well-oiled pair! Give each one of them a pair of loping shears and show them how to cut with them.

I've got to step back to tell you that when you start this kind of a program, you don't just bulldoze in there and go at it. You've got to do a biological survey of your property. You've got to be doing an ecological survey of your property. When we did all those things, first the Soil Conservation guy said, I've never worked with anybody like you. And he told me it'll take 41 acres of this grass to support one cow.

We worked with Travis Audubon in Austin, Texas, the San Antonio Audubon in San Antonio, and Bastrop Audubon just east of Austin. We did and still do year-round bird counts. At the time we had only 48 bird species, less than 50 bird species.

There wasn't a drop of water on this entire 5500 acres. I drilled seven water wells, 500 foot deep. I never got a drop of water. Today we have 214 bird species, we have water all through the place, we have 6,000 visitors a year, we pasture a cow on 18 acres, not 41, and we do not have a single water well on the place. We don't have a single pressure pump or motor. All of the water comes from sources that did not exist until we began working with the land, working with Mother Nature, and that big secret was removal of the lot of woody species that had encroached due to human impact, mismanaged land, poor land stewardship and getting grass. (Ill. 10)

10



Two and a half years after we began the process this began to show. When you see that moss, you know there's some moisture. When you see maiden hair fern, you know there's some moisture. This is way back up on a cliff on a hillside. You won't even get close to it with a truck. We saw that in August. What is all that green? Up there we went, and we discovered water dripping. And the next day with picks and shovels and crowbars, we went up and dug it out. Then the next day, carrying heavy bags of concrete in buckets up to that spot and we

dug it out and cased it all in. And that only produced a gallon of water a minute, which is enough water to take care of a family of four, if you can contain it. So there's the little enclosure that we did. And as these other little seeps and springs developed across the ranch, and today there's eleven, we did this one. (Ill. 11)

11



And this one is so remarkable because there's nothing to it. It's a tile off of a chimney. On the right where it doesn't show we had that seepage, about 12 foot just seeping out of solid limestone. We chiseled in there about 10 foot, and we took a PVC pipe, drilled hundreds of holes in it, slipped it in there, and then cemented it over and the water come out of that rock, out of that stone and flowed over to this tile, and out of that tile into cisterns where we could then let it drain into our homes.

I have a book out. It's the third, and I'm bragging now, the third-best-selling book, Texas A&M University Press produced in 2007. It's in its fourth printing. The title of the book is *Water From Stone*. And that's a biblical theme too. The University Press chose the title. But it's so fitting for all that we've accomplished.




12



For a place that had no water, there's two 6,000 gallon tanks. So with every one of these little seeps or springs we collect this water. We have over 40,000 gallons of it in storage. (Ill. 12)

And all of these seeps and springs are at the top 125 foot of the hilltops so we can gravity flow it. We gravity flow it as much as four miles to houses and buildings that we have on the ranch. And then when all those cisterns are full, well, a float comes up just like it does in a commode at home. It shuts it off and the water shifts over to our earthen tanks where fish and birds can come and any wildlife can drink.

13

	Cedar:	Canopy interception	36.7%
		Litter interception	43.0%
		Water reaching soil	20.3%
	Oak:	Canopy interception	25.4%
		Litter interception	20.7%
		Water reaching soil	53.9%
	Bunchgrass:	Canopy interception	18.1%
		Litter interception	0.00%
		Water reaching soil	81.9%

This is an interesting thing. This is not my slide either. This was produced by the University, and it shows the difference between grass and oak trees and cedar trees. (Ill. 13) And if you look real close, if you were in a one-inch rainfall in a cedar break, only 20 percent of that one-

inch rain would ever reach the earth; if you're under oak trees, you would get almost 54 percent of the water reaching the earth.

But when you have grass, you get 82 percent of the one-inch rain reaching the earth, and that's what replenishes aquifers, that's what makes creeks run, that's what makes wells work, and that's where your clean water comes from, filtered out by the root systems of grasses. It doesn't seem possible that a cedar tree, with those little tiny needles like the lead of a pencil, would have more surface area in those leaves of a cedar than there is of an oak.

Here's the secret. In ranching, we have a couple of hundred mother cows, we have 500 goats, we have about 85 African antelope. Everything we do on Selah, Bamberger Ranch, is not designed to demonstrate one thing, but to show everyone as a model that you can be a rancher with your cattle or your goat or your sheep, you could be a conservationist, you could be an environmentalist, you can protect everything for everyone. It's not exclusive. You don't have to be one or the other. You just have to be good at it, and you've got to keep your eye on the ranch.

So we have a little cliché that applies to you people, too, in your homes, and that cliché is, When grazing you take half and you leave half. So when you turn your cattle in to a pasture, you've observed how much grass you have and you watch them by the day, and as they graze it back down, you move them to another pasture. You mow your lawn at home—most everybody sets the thing too close. It requires more water, there are more insects, it needs more fertilizer, they're more susceptible to worms and parasites in your grasses. And so you can see when you take the top that, if you take too much off, your root systems of

the grasses begin to shrink, you get spaces in between, and then the next thing you know, a woody specie is able to grow.

We didn't invent our rain machine. This is Steven Fulton, he's six foot eight, he's our biologist and a wonderful human being, just finishing his master's degree at Texas State and moving on to the doctorate. But our rain machine demonstrates those two trays there on the right. You've got the cedar tree on the left and we replaced it with grass. We put five gallons of water in the top and pull the lever. It simulates a one inch rainfall because there's 200 hypodermic needles putting water down on each one of those surfaces. I mean if you built one of those, if you try to buy 400 hypodermic needles, you know you may have the ATF folks at your door. (Ill. 14)

14



You get the questions. But that shows this rainfall hitting these two landscapes. Within one minute the rainfall on the tray on the right is not having runoff and it's carrying—you see the muddy water—it's carrying the soil right with it. On the left, we very rarely ever get any runoff water. And seven minutes after we start the rain machine it starts coming out in the second jar, fresh clean water. I don't do it anymore because I passed the baton to young people that we've brought in there, but I used to pick that up and drink it. Can you imagine how it was a good show but it wasn't too tasty!

Another thing, remember I said we went from 48 bird species to 214? We do bird counts three times a year, religiously ever since I've been there. And as the habitat improved, the next time we were up to 60 bird species, and then 70 and then 75 and then 100 and so on. As the habitat improved, you could graph it, and you could just see those bird species increase.

Now why? You look on the right tray, on the right corner of that tray, I've got a thermometer. The soil under that cedar tree is 17 degrees hotter in July and August than it is over on the grass edge. So the bird species went up for two reasons. One, more bugs and organisms could grow and the bird could eat

15



the seed of the grass or he could peck around and scratch and get the insects out of the grass.

Holistically it all works together. And, you know, it doesn't take money; it just takes a passion for it and tenacity. You've got to stay with it. There's no instant success on restoration. Mother Nature doesn't work, buy garden shears. You've got to stay with it. Remember never initiate an action that you're unable to sustain. Don't get into it if you don't want to follow through.

Okay. I'm wearing you out with that one. There's a yellow Indian grass, wonderful grass. (Ill. 15) That isn't going to grow on the hillsides; it'll grow on the

tops and in the valleys. There's Margaret, my wife, in switchgrass. (Ill. 16)

16



You can see in both cases that the grass was very tall, five and six foot. And this is just a prairie scene of all kind of native grasses. There's indicator grass. It's called bushy bluestem, and any time you see that there has been water close to the surface. That's Margaret. And we've shared the ranch with literally thousands, tens of thousands of people. They're invited there to a grass workshop. We used to have 72 species of grass on the grass trail. We've taken it back to

20 because nobody could learn that many species in a one-day workshop. So we cut back to the most important grasses. About 50 percent of our guests are landowners that just bought land. There's our grass trail that shows you. That's your big bluestem, a very desirable grass, very rare in the Hill Country. (Ill. 17)

17



Grass and water go together. For a place that didn't have a drop of water, this is what we call Madrone Lake. And the water's so clear you can see down 10, 12 feet. This is one we call a summer rain tank, and another water, two creeks that run that create the sound and the beauty.

18



That's what Stephen F. Austin came through when he saw the beauty of Texas. (Ill. 18) He saw water, he saw the tall grasses, he saw the trees. He saw what a lot of us have missed in the Hill Country and in other parts of Texas due to the fact that we weren't good stewards of land.

We weren't thinking. We were thinking, as the historian told us, but not thinking ahead. We were doing like when Bromfield came back to the States from Europe and discovered his grandparent's farm abandoned, we'll just move on. Water, water. This is coming in. This is where that first scene with the yellow flowers, it was right there. And all of this water.

This is the latest project. The Lower Colorado River Authority, the Board of Directors were out just two weeks ago. Here the Texas Water Development Board was out two months ago. They said, Bamberger, where did you come up with this idea? Oh, I said, I didn't come up with it. You didn't? I said, No, the Phoenicians were doing this 5,000 years ago. (Ill. 19)

19



So what did we do? I came up with a plan for the future. Even my own staff over there thought I was goofy. I want to build 28 miles of stone berms on the hillsides on this property. Twenty-eight miles. I've only got three and a half of it done. And they're designed to slow down the runoff of water.

And up on the top I'm building 12 miles of these—I call them water pans. This is just one view of them. The reason for the stone berms across them, because the land is not level, it runs downhill and I didn't want the water to run and create a gully. Then here, this one is on the very tops of the hills. This and all the other structures don't require equipment, it just takes labor, hand labor. Except this is a half-moon on top of the hill. It required a dozer. (Ill. 20)

And this was so interesting. It was pouring down rain, but when this got done, in 48 hours that water—that's solid limestone under there—in 48 hours it had gone through hairline cracks. I built this 125 foot down, and under the lid right there I've got pipe and valves and hose bibs and everything and stop-watching containers to measure it. Within 48 hours of that first rain that came after this construction began, I was able to pick up an extra gallon a minute

20



21



coming out of the sides of these hills and into my little water feature there that birds and cattle and wildlife can water. This is where we teach a lot of children about critters.

Now there's your 125 foot on top of the hills where those berms were, that's where the water pans and that water is slowed down and given time to soak in. So we do a workshop on this we title it, Water, How to Get It Where There Ain't Any.

It blows people's minds that we don't have water wells. We don't have them, no motors and pressure tanks. This is our historical marker. I love this one. This is the only thing on our place that's contrived. I made it up. (Ill. 21)

It's in Memory of Man. Two million B.C., 2000 and question mark A.D., hey, we're moving in on that. When's the world coming to an end as we know it? It says, He who once dominated the earth destroyed it with his own waste, his poisons and his own numbers. And I put the historical marker sign up there. And when I first put it up, this tickled me to death, every single individual that drove in there said, "Oh, my god, did he find Davy Crockett or somebody out there then?"

And they'd stop and read that. I put this—I'd love to tell you this one because it's kind of funny. A friend gave me the stone. I took it to a stone carver in San Antonio and, of course he took off his hat, put his hand over his heart, thinking I'd come in to get a tombstone made.

After a little small talk he said, "Well, Mr. Bamberger, who will we be honoring here?" And I whipped this out. He puts his hat back on, he said, "I'll be damned. I've carved tombstones for canaries, horses, and donkeys. First time I ever buried the whole human race!"

That was a lot of fun. But it's where we meet everybody that comes. We do about 3,000 school children a year and we work primarily with Title 1 schools. Margaret and I learned that in the state of Texas, this is sad, that 100 percent of our Title 1 schools were failing in science. Failing in science on the state-mandated tests. We thought we could do something about it. We came up with an idea. We went to Metz Elementary School in the eastern part of Austin, a Title 1 school. And Title 1 schools are where the children's parents are so poor that the children get a federally funded breakfast and lunch. It's not racist to say it's primarily brown and black. But we do one in San Antonio, Bonham Elementary School, where all the kids are white, and most of the mothers are in battered women shelters. But the kids are failing in science. They never get out. They never walk on grass; they walk on concrete and blacktop. So we went there and we said we had this program. The school principal said, sounds wonderful, but we don't have any money for that. Well, you don't need money. You bring these kids, it's on us. We feed the kids seven meals; we have them three days and two nights. The only obligation is for the school to get the kids to us—no cost to the taxpayers not a penny, the school not a penny, the parents not a penny. We have them at the ranch for three days and two nights. And I have the testimony, the only thing I asked the school principal to do, and this is 10 years ago, to quantify what we were doing. Did the experience they had at Bamberger Ranch really amount to something? For the elementary in East Austin, the only one that I have on tape, the failing rate was 80 percent, we reversed it to passing rate of 80 percent. We only had the children three days.

When some of these children arrive, the biologist, Steven Fulton, sometimes has trouble with even getting some of the children off the school bus. It's so foreign to them. And they're pretty hyper, they're hard to work with in a way, but by the time they leave, they're holding on to Big Steve with their arms, his legs. They don't even want to go home, because in three days and two nights we've changed their lives. And if I tell you some of the things that happened, you've never had it happen to you. For example, Big Steve can imitate birds so well that you know it's a bird. And he takes these children out at night, and they're scared to death, sits them down in a classroom in a valley and he says, Now, be quiet I'm going to call and talk to an owl. He lifts his lips and imitates a screech owl. And off, a quarter of a mile away, a screech owl answers. He tells those children, Be very quiet; you won't get hurt. He does it again. A screech owl answers. It's only 100 yards away. He does it one more time and the screech owl comes in and lands from me to you. And Steven turns on that two-beam light and shines it in that owl's face, and that owl says, Oh, I've been taken and flies away.

But the children are blown away. Colleen Gardner, our executive director now, I hired her right out of the Peace Corps, one of the greatest programs American ever had. When she came with us she didn't know a cardinal from a sparrow. She knows all her birds, grasses, trees, now because we've taught her all of that. But she's also taught herself beekeeping. And she goes out with these children. They're all about this far away as you people in the front row. And she says, Now, after she takes the hive apart, and she gives each kid a sample of this honey, she said, I need four very brave children to help me clean this up. And

she recruits four brave children and she assures them, You will not get hurt. I promise you, you will not get hurt. She has them come up to the centrifuge, and lets all the kids put their hands and their fingers down in that honey. They're dripping with honey. And she says, Now, come on, you won't get hurt. And she has them stretch their arms out and open their hands. Thirty seconds after she does that, their hands are covered with bees, all over them. Ah, ah, ah, ah. And then a minute later all the bees are gone and their hands are just as clean. That's how I clean my equipment up here.

Bees. Do you think the children, when they look at Colleen, they call her Queen Colleen? She puts a little tiara on. And Big Steve, do you know why they hold on to his leg, why they don't want to go home? We put the child back into Mother Nature, and they begin to see. I'm the last person that gets to see them. I'm 82 years old and I still do it with enthusiasm. I'm the last one to see them. I say, "How would you like to grow up and be like Big Steve or Queen Colleen?" And I say, "You can. You can know all the things they know, you can have a job like they do. But you've got to learn. You've got to value what's happening to you here and what happens to you when you go back to your school. You've got to ask your teachers so many questions—don't be afraid to ask questions, until she's sick of you asking questions." And the teachers are right there with them, you know, when I tell them that. "And you've got to resist the temptation to go down in the back alley, head down to McDonalds or something, or do something that you know you shouldn't do because it's not the best for you. Read books, study, ask questions and you can be just like Queen Colleen and Big Steve." So now here's these kids are back in school here, and that school principal, on a DVD that we produced, has given his testimony that we've done that with these children. Get them on a new path; set their lives on a new path, I got way off on that, I'm sorry.

The reason I told you that was why I always wanted a greenhouse; I couldn't afford it, and that's the way Jim and I started. He was my Tree Aggie, I called



23



him. But a few years ago a generous donor gave us enough money to build a greenhouse. Terry Hershey here just asked me before I stood up what we've done with Selah. "Did you put a conservation easement on your property?" I said, "No."

I gave the whole ranch away. It's set up into a foundation, a 501(c)(3). It's as deductible as sending your donation to your church, and we've given the property to that foundation. It has an outside board of directors. And we do look for grant money to help us with some of the school programs.

This is some of our tree planting. (Ill. 22) We've planted over 4,000 trees. That's one in a grow bag. We get them up that big so we can have an instant tree. That bag that weighed 85 pounds and took some effort just to move it at all.

And this I'm so proud of too. This is a federal- and state-listed endangered plant called a Texas snowbell, *styrax texanus*. (Ill. 23) Scientist, biologist, federal people claimed there were only 80-some of these plants in the whole world, all of them in Texas, the Texas snowbell. Steven, Colleen, some volunteers, and I have discovered more, because we've knocked on doors, door-to-door in West Texas, and ranch-to-ranch. It took me five years to gain access to the first ranch where we discovered more than 100 of them. We have collected seed, propagated the plant, and returned the plant to the watershed from which the seeds

24



were first collected. We now have 682 alive and doing well in the ground. I'm going to finish up next year with 1,000, then turn it over to somebody else. That's the flower. There is one in the Hill Country called the Sycamore leaf that looks almost just exactly like it. This is Colleen Gardner, and this was the first snowbell that we planted. We come back a couple of years later. We're now collecting seed off of ones we've planted, and we put some of them in corrals that are six foot in diameter for protection from browsing.

I have almost as many Big Tooth Maples as Lost Maples State Park. (Ill. 24) I have 408 bigtooth maples that I planted, just awesome. I have qualified over 100 Boy Scouts for their merit badge by planting trees. We do the workshop on tree planting there. We just planted a big basswood. And the school systems, they come, the older children, and some from the university system as well are studying water critters.

And this one I really love. It was the University of Minnesota exchange students. We have the University of Texas and University of Minnesota exchange students, and they study the Monarch butterfly. These are students from Minnesota that came down in the fall, and our students go up there in the spring to study the migration of the Monarch butterfly. But I learn from these children, these kids, these kids right here. They set out these little tents and everything there at the ranch, and I said, Well, what are these for? She said, Oh, these are for our butterflies. Well, wait a minute, butterflies are flying all over, you don't need a tent that big. They brought out a shoe box and in the shoe box were all these envelopes, and they released 1,000 butterflies. They flew down here with them in a shoe box. It blew my mind, but I've learned a lot about Monarchs just from the kids.

25



This is the facility we built. (Ill. 25) We call it The Center because I've wanted to invite people from the left and the right of environmental issues to our ranch, and I named it The Center because it's the center aisle in Congress where com-

promises are made sometimes! It's also the center of a hurricane. Right in the very center things are calmest. So that's what we did, and we have done a lot of programs, and that's where adults and children stay.

We've got many outdoor classrooms. This is a bird feeder, six-acre bird feeder. Plowed it up. We've got a high fence around it; the only things that can get in is a bird. Interesting thing, I have chili patines all around the edge. I didn't want predators to get in and I spread them, and the turkeys came down when those patines come up. They ate them and ate them and ate them. My wife said, You're going to get a turkey for Thanksgiving. I popped one, picked it up, and the breast meat was so hot from the chili patines we couldn't eat it.

26



27



Another discovery on the ranch is dinosaur tracks. (Ill. 26) These are some of the best ever discovered in limestone, Edwards limestone. You can even see the two toenails. Folks, this is 105 million years ago. The historian that spoke before me wasn't going back that far!

This is an oddball one. (Ill. 27) You won't see this anywhere on the planet Earth. It's an idea I had. Thank God it worked. But I asked Dr. Merlin Tuttle at the Bat Conservation organization, Do you think I could build a cave? He thought it was goofy, but he later on said, I think you could. Well, this is what I built. You go to an architect and tell him you want an architectural

plan for a bat cave. He don't know what you're talking about. Anyway, we built this from scratch ourselves. And last year, working with Boston University and University of Tennessee, they come every first and second of every month in summer time to count. Last year we had 200,000 Mexican free-tailed bats flying out of there. They congregate inside of there, 300 per square foot, 500 per square foot for their babies.

This is where I teach the children about the conservation. I skipped over that when I talked about the children, but I ask the children to do a conservation project that their teacher can't do. And they're excited about that too. I said I want you to become the conservator of your family's culture, your family's history. You do that by calling on a grandparent and asking them questions. Find out why: why's your name Billy, where did he come from, and who's that, what kind of clothes did my mom wear when she was my age, and what kind of toys did my dad play with? And you write it into a journal.

Folks, I'm going to tell you, the best letter I ever got in my life came from a grandparent. He said, Dear Mr. Bamberger, I'm 92 years old. My granddaughter never gave a hoot about me until she came back from your place. Now thank you, sir. She comes to see me once a week with a clipboard and a pencil asking me all kinds of questions. Isn't that wonderful?



Thank you for listening, folks. It's been an honor to be with you.

STEWARDSHIP OF THE FUTURE

JOHN CORNYN

MR. GEORGE: John Cornyn is a native son of Bexar County, city of San Antonio, educated at Trinity University and St. Mary's University Law School, practiced law, litigator in San Antonio for several years, a state district court judge in San Antonio, sitting on that bench, taking all kinds of civil litigation. I was talking last night about the role of our judges, and particularly the trial court judges who are dealing with domestic disputes, foster children's issues. Among the more important jobs in America is that person who's making those decisions in the trial court bench and state courts across the United States.

Senator Cornyn moved on to be a Justice of the Supreme Court of Texas, Attorney General of Texas, and has now served eight years as a United States Senator from Texas. He is a leader of the Republican party. He has served Texas in a public way for now most of his life. I give you now, John Cornyn, U.S. Senator from Texas.

SENATOR CORNYN: Jim, thank you very much. And thanks to all of you for allowing me to be here today. I feel a little intimidated after these last two outstanding presentations. They really were spectacular, and I want to thank Dr. Brands and Mr. Bamberger for their contributions.

I know some of you are wondering what in the world I am doing here today. If you've been watching the television, there have been a couple of votes on the floor of the US Senate this morning, and let me just explain.

Sandy and I had to come back to Texas for a funeral of a dear friend on Thursday. In my conversations with my staff, I was wondering whether we should come back to Washington for these votes, I realized that basically everyone knew that they were going to fail.

Not to get you into the intricacies of Senate procedure, but these were cloture votes and if the cloture vote fails, debate continues, and of course on the extension of the expiring tax provisions, the debate is continuing, and hopefully rational minds will prevail and we'll come up with an extension of current policy for some time.

But I thought about quoting Shakespeare about tales of sound and fury signifying nothing, and it would seem to kind of describe what was going on in Washington. But anyway, I made a commitment to be here, and I'm delighted to

have kept that commitment and to be with all of you this morning, just because, so thank you very much.

Well, as Jim said, my topic is a rather highfaluting one, stewardship of our patrimony. But since this is a Philosophical Society, I figure we ought to use a ten-dollar word to describe the concept of our inheritance from our forebears as Americans.

I want to commend Mark and the Society for making stewardship an important concept, because it is one I think that is too easily forgotten. In the hustle-bustle world we live in things happen so fast things come at us so quickly it's hard to pause and reflect on the importance of the contributions made by the people who have come before us.

And certainly we stand on the shoulders of giants, people who have sacrificed so much and worked so hard to give us what we have not earned, but which we have inherited. I think of people like that—and you—I'm sure you have people in your own lives, people like my mom and dad.

My dad was a B-17 pilot in the Army Air Corps in World War II, the 303rd Bomb Group out of Molesworth Air Force Base, the 8th Air Force in England, and flew bombing raids over Nazi Germany knocking out Hitler's war machine. Unfortunately, on his 26th mission he was shot down and was captured and was a POW. Thank goodness for General Patton and his Army, or I might not have been here today.

But he was liberated. And, you know, I just reflect on my parents' sacrifice and their devotion, not to themselves, but to their children and to the future and how deeply and profoundly they felt their responsibility of being good stewards.

Well, more than 17 decades ago, a famous Frenchman, Alexis de Tocqueville, visited our young nation, as you know, and made a number of really poignant observations about our country that I guess only an outsider could make. He said our geography, our demography, our political and economic systems were all a subject of great fascination for him.

He even believed that Americans had an exceptional way of approaching philosophical problems. As he put it, "To escape from imposed systems, from the yoke of habit, family maxims, class prejudices, and to a certain extent national prejudices, to treat tradition as valuable for information only, and to accept existing facts as no more than a sketch to show how things could be done better, such," he said, "are the principles of what I would call the American Philosophical Method."

And so this morning I want to reflect just in the brief time that I'm going to be talking and I hope, as Jim said, there is a chance for questions or if you want me to just to stand here and listen while you talk, I'll do that too.

But I'd like to reflect on three practical applications of what de Tocqueville called the American Philosophical Method, or to state it another way, three ways that America can remain an exceptional nation, and what we must do to remain good stewards of our inheritance of this extraordinary nation.

Well, I think one of the first things we need to do is to be good stewards of our free enterprise economic system, the foundation of the private sector and the economic growth that has provided opportunity and jobs for so many. I

know sometimes it can seem counterintuitive, particularly during a time like we've been through during this financial crisis when people have grown to distrust business, Wall Street, and the like, to talk about the importance of defending our free enterprise system, particularly at a time when about 15 million Americans remain unemployed, and when we are recovering, as I said, from the worst financial crisis since the Great Depression.

It could also seem counterintuitive to say that free enterprise is exceptionally American, when we actually inherited it from others, the entrepreneurial capitalism that was first developed in Europe, and which has now spread to China, India, and dozens of other nations to help them recover from their failed policies of statism and protectionism, and in the process become much stronger tent poles in the global economy.

In fact, these days it may seem that America is the country that is somehow hesitant to fully embrace the free enterprise system, and is perhaps wavering somehow in our commitment to open markets and economic freedom. Now there's no need to go into what's happening in Washington these days to talk about why our trading partners, and maybe the rest of the world, are sensing a hesitancy on the part of this great nation. It's easy to see though our policies, whether it relates to fiscal policy, monetary policy, or regulatory policy, but I would simply put that our great state, I think, remains a beacon that demonstrates that policy matters, that policy can facilitate a situation where the entrepreneurs, the investors, and the free enterprise system can create economic growth and opportunity and jobs.

I'm not going to say anything about California in contrast, by the way. But I believe in good stewardship of our free market systems—I mean we need to look beyond the temporary policy debates of today and recognize that economic liberty remains one of the cornerstones of the American way of life.

Abraham Lincoln may have put it best, as he seems so often to do, when he said, "I don't believe in a law to prevent a man from getting rich. It would do more harm than good." So while we do not propose any war on capital, we do wish to allow the humblest man, we'd have to add woman today, an equal chance to get rich with everybody else. That's what economic freedom is all about.

And sometimes we fail to think about what the benefits of this economic freedom that we enjoy has on the humblest man and woman, but it clearly does benefit them as well. Economic freedom has lifted millions of people around the world out of poverty. Economic freedom has made it possible for immigrants from all over the world to come to America and to live the American dream. Economic freedom continues to foster innovation and new technologies which have raised the standard of living for everyone.

Economic freedom creates a broader material prosperity than any other system known to humankind, as well as a completely different way of relating to one another as human beings. After all, buyers and sellers treat each other differently than do a benefactor and a supplicant.

People with real economic choices have far more dignity than those whose only choice is to obey the command of a dictator, a party leader, or a war lord.

Even here in America no one will ever argue that private businesses could learn a thing or two about customer service from the Internal Revenue Service or the Department of Motor Vehicles.

Now Adam Smith, the father of free markets, developed ideas that grew out of a reflection on public virtue. And, of course as you know, he was a moral philosopher before he was the world famous economic philosopher. He observed that economic freedom helps to promote what he called the moderate virtues of self-discipline, prudence, and civility. And added is what Arthur Brooks, the current head of the American Enterprise Institute, has called earned success.

Now Arthur Brooks has written a little book, about 128 pages long, that I would commend to all of you. It's called *The Battle*. And what he describes in there is what he calls the new war basically, or battle between those who believe in bigger government as the answer and those, on the other hand, who believe in the free enterprise system as most consistent with our economic liberty and our political liberty.

But he argues that earned success is what makes people happy, much more than material wealth or quality of economic outcomes as a result of a redistribution of wealth. As he puts it, earned success means the ability to create value honestly. Earned success is the stuff of entrepreneurs, and also what parents experience when their children do well, what social innovators feel when they change lives, and what artists feel when they create something of beauty.

Earned success is what makes America, and particularly our state, such an attractive place for newcomers. Those of you who remember the movie, "Field of Dreams," remember the phrase, If you build it, they will come. Well, a society based on earned success is like that baseball diamond. As we have built it, particularly as our forebearers have built it, people have come, and we've been enriched and improved our great country and opportunities as a result.

Unfortunately we don't have time today, Jim, to talk about that immigration issue that you reflected on earlier where you had all these Americans, illegally immigrating into Mexico.

I would simply put that earned success is one of the things that makes America, continues to make America, an attractive destination for immigrants in the first place. And the challenge for us as stewards of this remarkable engine of earned success is to recognize that, yes, if you build it, they will come, but so too if you destroy it, they will go elsewhere.

Our children deserve to inherit not only economic freedom, but political freedom as well. And so good stewardship is required here as well. Unfortunately, our children's future choices have already been severely restricted by the debt that we passed on down to them, or we're prepared to pass on down to them unless we act heroically and courageously to correct it.

Many Americans recognize that the national debt is a fiscal and economic burden, of course, because our debt now is roughly \$14 trillion. Jon Fleming, I think it was, was talking about what a trillion is, and it's just really more than we can actually contemplate. But \$14 trillion is our national debt. And now 40 cents out of every dollar being spent in Washington, D.C., is borrowed money. Forty cents on the dollar.

Some Americans have seen this growing mountain of debt as a national security risk, which it absolutely is. Just ask the Chairman of the Joint Chiefs of Staff, Admiral Mike Mullen, who said that, Our mounting debt is the biggest threat to our national security. Secretary of State Hillary Clinton said, “The debt undermines our capacity to act in our own interest and also sends a message of weakness internationally.”

And you know who the principal purchaser of that debt is, not a benign influence in the world, not necessarily someone upon whose tender mercies we would care to depend. Yet the most obvious and direct impact of the debt is that it limits the choices available for the next generation. Every dollar of interest we pay on the national debt, not to mention principal, is a dollar our children will not have the freedom to spend as they see fit. Every dollar of taxes to pay off the debt represents to generations yet unborn taxation truly without representation.

Now the national debt’s nothing new. We know the framers of our Constitution, when they met in Philadelphia, had to deal with debt, but they realized the Articles of Confederation did not empower this national body to deal with it, and particularly the debt incurred as a result of the American Revolution.

One of the great achievements of Alexander Hamilton, our first Secretary of the Treasury, was to come up with a way to refinance the debt of the states as well as put the federal government on a sound financial footing. Yet today the debt represents a challenge to the very legitimacy of our constitutional system and our legacy of political freedom.

I say this not because of the historic size of the debt, although when it comes to debt, size does matter. I say it because the debt seems to be growing out of our constitutional control, or at least our will to control. Congress has not yet been able to agree how to keep total revenue spending in line with the total revenues, total spending in line with revenues.

This may shock you; the President’s not even required to submit a balanced budget to Congress each year under the Budget Act. President Obama’s own Bipartisan Debt Commission cannot reach a consensus on the choices necessary to balance our budget. I would encourage you, by the way, to find on the website of the Fiscal Commission, a 66-page report, you can download it and read it for yourself. It’s more than a sobering description, not partisan in any way, but a factual description of where we are and the challenges that face us.

Well, some argue that the big problem is entitlement spending, Social Security. You know, we’ve heard about the scourge of the baby boomers growing up and becoming now eligible for these programs, and fewer and fewer workers working to pay into the programs, and more people qualifying for these entitlements because they are so-called mandatory spending.

Congress doesn’t appropriate money for those. It says you are eligible if you meet these criteria, and the obligation indeed is open-ended. But we’ve seen even last week that Congress has an unwillingness to take even the first small step in adopting a moratorium on Congressionally directed spending, or earmarks, a process that’s become abused over the years, and which has become a symbol of wasteful Washington spending.

Now I believe there is a solution to this challenge, and I think it is, quite sim-

ply, not a new solution, but a balanced budget amendment to the Constitution. It's not revolutionary. Forty-nine states, I believe, either have a statutory or a constitutional obligation to balance the budget. The state of Texas does, and our state legislators and our state leadership will have to do that when they convene after the first of the year.

I'm going to introduce a joint resolution in Congress after January 1, that we adopt a balanced budget. Again, it's not a new solution, it's not a new idea, but it is a way to force the Congress to match up expenditures with revenue in a way that every family, every business, everyone in America, almost virtually every state, everybody who can't print money, and who can't borrow the money has to do.

So I think that while we've seen an incredible political movement arise here over the last year in America, sometimes called the Tea Party Movement. They are a diverse lot of people, some disaffected party members on both sides of the aisles and independents alike. One of the things I think we've seen a political reaction to on November 2 was not just spending and debt, although that was part of it, but the deeper relationship and concern about the relationship between the people and their government at the federal level.

Now this, again, is not a new issue, but it has come clearly into focus for us. Back in Merry Old England, when Edmund Burke was commenting on this issue, about what's happening in America. He said, "Leave the Americans as they anciently stood, do not burden them by taxes, you are not used to do so from the beginning." He said, "No one will be argued into slavery, that is legal slavery will be no compensation either to their feelings or their understanding."

But the British didn't listen to Burke, but I submit that we still can. We can start by respecting rather than patronizing or marginalizing those who have very real and legitimate concerns about the direction of our federal government. And rather than discouraging them or deprecating their participation as guaranteed under the First Amendment to petition their government for the redress of grievances, I think we ought to welcome more of our citizenry to the political debate. We need their help, we need the participation of as many people as we can get.

And so I would say that there's two ways that we can deal with a balanced budget amendment under Article Five of the Constitution. The traditional one is it would emanate from the Judiciary Committee in the Senate, on which I sit. The Constitution Subcommittee would pass a resolution, it would go to the full Judiciary Committee, then it would come to the floor of the Senate as it last did in the early '90s, where it fell two votes short from passage.

A second way of doing it, and really they can operate along parallel paths, is a constitutional convention. Now believe it or not, this has been seriously debated and discussed over the years, but at a time where our deficits were a fraction of what they are today.

So if 34 states, for example, thought a Constitutional Convention was a good idea in the 1990s, how much more compelling an idea would it be in 2010 when our deficit is multiples of what it was back then. And how much better

can we demonstrate the very rationale of our democracy, which is the source of legitimacy of government, comes from the consent of the governed, not from top down solutions dictated by elected leaders or others.

So the traditional concern about a balanced budget or a convention would be that there would a runaway convention, all sorts of nutty ideas would be proposed by a Constitutional Convention, and they would become part of our constitution and ruin our country. But, you know, our Founding Fathers were pretty smart. They prescribed in Article Five that three-quarters of the states would have to ratify any constitutional amendment, and I think that provides the check on a potential runaway convention.

So I think now may be the time, unlike any time we've seen before where the mood of the country and the opportunity to not only preserve what we have, but to extend those blessings to our children and grandchildren may require this sort of extraordinary effort.

The third way we must be stewards of our patrimony is by vigorously defending America's role as a global leader. Now, unlike our heritage of economic and political freedom, America's position as a benign global hegemony is relatively new. President Washington, as you know, in his farewell address, advised against permanent alliances with other nations, entangling alliances.

John Quincy Adams, then Secretary of State under President Monroe, memorably articulated America's global outlook this way. He said, "Wherever the standard of freedom and independence has been or shall be unfurled, there will her heart, her benedictions and her prayers be. But she goes not abroad in search of monsters to destroy. She is a well-wisher of freedom and independence of all. She is the champion and vindicator only of her own."

Of course, inelegantly stated, my translation of what he meant was that America is not a threat to the freedom of others around the world, America has a history and a tradition, and indeed a culture of liberating people who have known only the boot heel of oppressors and domination from dictators.

Today I think it's really indisputable that America remains the most reliable defender of security, liberty, and freedom. Dozens of nations in Europe, Asia, and the Middle East owe their freedom and independence to the constant vigilance and heroic sacrifice of the United States, including that of our men and women in uniform.

Well, so let's change from Washington and Adams' time to today. Not the wisdom of the founders, but indeed I think ever since Pearl Harbor we have realized here in America that we cannot ignore what is happening around the world, because those forces will, if we try to ignore them, come here and find us, as they did in World War II. Within months after that attack at Pearl Harbor, we obviously were engaged in a world war. And then on September 11, 2001, another day of fire. Again, at a time when perhaps we thought we could ignore what is happening around the world, America's enemies found us here at home.

Suffice it to say that America has become a steward of a complex set of global responsibilities that the founders could have probably never imagined or foreseen, but which our political inheritance, thankfully, has been flexible

enough for us to be able to manage. We steward responsibilities which our economic inheritance, at least so far, has enabled us to support, and which our children should be proud to call their own.

Now this forms what sometimes is called American Exceptionalism, this appreciation of America's imperfect but nevertheless benign global hegemony, has become much more controversial in recent years as you know. And I'm not talking about the difference of opinion over specific policies.

We can, and we should, have honest, open, and transparent debates about our strategy in Afghanistan. We can discuss the efficacy of the START Treaty that the President has entered into with the Russians, which will be debated and voted on in the United States Senate, as well as our approach to real threats to our safety and security like Iran and North Korea and so on.

What I'm talking about is the common conviction that was handed down to us, and which I believe we must maintain in good stewardship, a common conviction that America has been, and will be, a continued force for good in the world.

That despite our mistakes, our missed opportunities, and unintended consequences, America has managed our global responsibilities more selflessly than any other global power in history, and has done so more successfully than many of our critics ever thought possible.

Recently, however, it's become more in vogue to have an internalized view of some of our nation's most strident critics. Charles Krauthammer, one of my favorite commentators, delivered a lecture talking about this world view a year ago that he called *Decline is a Choice*. In his words, the new internationalism goes far beyond its earlier incarnation in its distrust and its distaste for American dominance. For what might be called the New Liberalism, the renunciation of power is rooted not in the fear that we are essentially good but subject to the corruptions of power, but rooted in the conviction that America is so intrinsically flawed, so inherently and congenitally sinful that it cannot be trusted with, and does not merit, the possession of overarching world power.

Now there's no need to catalog all the ways that this world view has seemed to influence our current policies with regard to other countries, and I will simply observe that public apologies for America have not changed the direction of some of our worst adversaries. The real tragedy, I think of this world view and turning away from this inheritance, this patrimony, is that it undermines the quality of our national character, that we need most right now, and that is self-confidence in America and its enduring ideals. In other words, the view that America has no more claim to world leadership than Cuba, Libya, or any other current member of the United Nations Human Rights Council, is not merely false, it's toxic.

Without self-confidence those American ideals, tempered of course with humility, acknowledge that we're not perfect, and a trust in a greater power than ourselves, innumerable tragedies could unfold. The greatest light of liberty that the world has ever known could be hidden under a bushel and eventually extinguished.

America could lose what de Tocqueville identified long ago as the key to our philosophical outlook, the conviction that our present condition is a sketch to

show how things could be done better, and our people could lose the sense that our nation even has a patrimony worth preserving for the next generation, that the notion of stewardship can apply at all to anything I discussed this morning.

Obviously I believe that stewardship of our patrimony is worth discussing, and I look forward to hearing from you. To conclude I want to address not only what we are stewards of, but who we are stewards for, and that, of course, is our succeeding generations.

First off, or one observation that is more hopeful than the second one, and which will probably be a little more controversial, what gives me hope is the realization that major educational reforms are underway across the nation that will transform the learning environment and expand the horizons of students across America and around the world.

Part of the reason is the advent of technology. We've developed new tools to deliver knowledge and assess student performance. Part of the reason is psychology. We've learned more about how students learn, how we learn. Part of the reason is a new consensus in America, in Washington as well as the states, that major reforms are needed, and possible.

Indeed, Texas was one of the early pioneers of educational reform in the country. But now many states are determined to do as much as we have, and perhaps more, and our challenge is to regain innovation initiative. But on a much more ominous note, I would say too many of our children are shackled by the burdens they bring to school, that prevent them from reaching their God-given potential, coming as they do from fragile families, which of course matters because parents are every child's first and most important teacher.

In my experience as Attorney General, I had the honor of collecting child support, among my other duties, for some 1.2 million children. And during the time I was Attorney General, thanks to the really heroic efforts of the Attorney General staff and our commitment to doing a better job, we improved child support collections by 84 percent, collecting about \$4 billion in child support during those four years. And this is from parents who were legally obligated to support their own children, but chose not to do so, either out of spite or just a determination that, you know, they were not going to meet their obligations.

Well, today we know that about 40 percent of children are born to single moms. I want to interject here that I think single moms are perhaps the most heroic figures in America today, and nothing I am saying is at all designed to criticize them. But we must recognize that when Daniel Moynahan wrote his famous report in 1965, he wrote a report about the future of the Black family in America at a time when only about a quarter of Black children were born out of wedlock. Today it's about two-thirds. Today 40 percent, as I said, across all racial and ethnic groups of children are born out of wedlock.

Ron Haskins, a scholar with the Brookings Institute, has written, along with a colleague, about the three things that people must do in order to have the greatest chance of avoiding a life of poverty. He said they need to graduate from high school, they need to delay childbirth until marriage, and they need to have employable skills so they can work. Those are the simple answers to an alternative of a life of poverty.

What we are seeing arise is what experts call multi-partner fertility in which both moms and dads have multiple children by multiple partners. New research has confirmed that with each new family transition, each divorce, each break-up, each new partner, each new sibling by a different partner tends to reduce the involvement of the child's biological parents in his or her life. Now reduced parental involvement in a child's life, particularly of fathers, has demonstrated a hugely negative consequence on a child's health, on a child's sense of well-being, and even their cognitive development.

Now I know many of us feel very uncomfortable talking about these matters because we somehow come to think of these matters as purely private. But they do have public consequences. Thus I think respectfully, and in a way that recognizes the dignity of each human being, we need to find some way to deal with it, and to talk about it in a way that's constructive, in a way that helps us make sure the future generations can live up to their potential, so I think it has to be a part of the conversation.

In some ways the challenge is similar to that of educational reform. For too long we've presumed that the goal in educational reform is to maximize the satisfaction of the adults in the picture, and that the well-being of children will somehow miraculously follow. But more and more research seems to confirm that what makes adults happy doesn't always produce the best results among children. And indeed some choices by adults put children at greater risk than they would otherwise be.

So I believe that we have to be good stewards in all aspects of our life. And I believe fundamentally, if we're going to be good stewards of what we have inherited through no contribution of our own, through no hard work, through no sacrifice but that of others, that if we're going to hand off a patrimony to our children and the future generation, that we have our work cut out for us. Thank you for listening.

Q&A

MALE VOICE: John, I am trying to reconcile my knowledge with a couple of things you have said that seem to make little sense if you are as concerned about the debt as you say you are. You are opposed to raising taxes on those in the top income bracket and instead you are focused only on reducing certain expenditures, some of which are likely to have detrimental effects on the economy and on the lives of many Americans.

And the second one has to do with how you plan to work with the Tea Party. I see a substantial number of them elected on themes which indicate that they would rather us turn our back more on the world and concentrate on our own activities.

MR. GEORGE: I didn't say it was going to be easy up here, John.

SENATOR CORNYN: If it were easy, it wouldn't be fun, Let me talk about the Tea Party first. In this election I think anyone who interprets what happened in

this election is an embrace and somehow vindication of the Republican Party is misreading what happened.

This is a vote in opposition to what people saw as a very aggressive growth of government in a way that made them inordinately uncomfortable, particularly the healthcare bill, I think, was the most central part of that because people worried about all the takeovers and the spending and the debt.

And so in regard to the Tea Party folks: most public opinion polls I've seen said some are disaffected Democrats, some are people who used to be Republicans and now don't like the Republican Party so they are on the fence. So we're all on probation is the way I interpret this election.

And we know what their concerns are: it's jobs, spending and debt. If we don't get about addressing their concerns, then I think they will exercise their constitutional right to throw the rascals out and to get somebody elected next time around who will address their concerns. So that I don't view it as necessarily a partisan victory for my political party.

On the taxes and the debt issue, I don't believe it makes any sense to raise taxes, particularly during a fragile economic recovery. I think we've talked a lot about stimulus and Keynesian approach to economics which unfortunately I think has largely been a failure—spending borrowed money in order to try to get the economy going again.

The idea that we'd have to raise taxes in order to maintain what has been tax rates for the last 10 years, strikes me as very odd. Why would you raise taxes on some in order to maintain the current tax policy for others? And again, I think we're in this time of potential particularly fragile economic recovery where I think if you're talking about a stimulus, I think tax increases are an anti-stimulus.

But I think it's bigger than just taxes. I think it's the uncertainty of what the policies are that are going to be coming out of Washington, D.C. The uncertainty particularly affects the smaller businesses, which are the primary engine of job creation, because if you're going to have a new regulatory burden, let's say you're in the oil and gas industry and you don't know what the Environmental Protection Agency is going to be doing next, you cannot plan.

If you're a mom and pop operation and you have, let's say 10 or 20 employees, you don't know what your financial obligation is going to be in terms of providing government prescribed healthcare benefits, what the cost is going to be and the like.

And so I think there's a lot of uncertainty, tax policies and others. If you had some money to invest in a business or to grow your business and create jobs, would you take a chance on doing it when things seem to be moving so much and there seems to be so much uncertainty?

Where I come down is I think we've seen the government can't be the engine of job creation or economic growth, it just doesn't work. It's the private sector. And so what do we need to do in order to encourage the private sector to grow the economy and create jobs and opportunity? I think that's the debate.

Over what kind of tax rates there ought to be, we can have a good conversation about that. I think we need to overhaul our entire tax system. It's become

inordinately complicated, too many carve outs and special loopholes and subsidies that make no sense. As a matter of fact, the Fiscal Commission report that I commended to you earlier has a large section about basically starting over and creating flatter, simpler tax system, and eliminating a lot of the subsidies and other provisions which are riddled with special interest exceptions.

MALE VOICE: Senator, a few of us in the audience are from higher education institutions, and the Dreamers are getting a lot of discussion right now. Perhaps the tiny little piece of this we see would be typically the young child who comes with his or her parents illegally to the US, then earns a college degree and is highly talented, but then can't get a job without proper paperwork.

And yet I know you've talked about this issue, but it gets all mixed up into a whole variety of immigration issues. Perhaps you could share with us your views about that piece anyway of the immigration issue and how you see that playing out.

SENATOR CORNYN: Well, thank you for the question, it's a very important one. I have a lot of sympathy for these children who have no culpability whatsoever. They've come with their parents to the United States, their parents came without a visa, they came to get a job, provide more opportunity for their kids, but in violation of our immigration laws.

And we know that in 1986, when Ronald Reagan signed the last major amnesty bill, there were roughly three million people who benefitted from that. The trade-off was supposed to be that we would actually then have an enforceable system of immigration laws. And people, I think, got the sense that, well, their amnesty was granted, but, you know, where's the enforcement of our immigration laws?

And so they lost confidence in the federal government. I think the primary problem we have today is people don't trust the federal government to do what it says it is going to do. And, in fact, the federal government is discouraging others from trying to fill the gap left by the federal government inaction when it comes to border security and particularly in immigration reform.

So I believe that the DREAM Act, which I voted for in the Judiciary Committee, should be a component of a larger immigration reform bill. There are a lot of unanswered questions though as what rights those children would have, let's say, to bring in siblings, parents and others, so-called chain migration, what sort of screening we need to do in terms of criminal records, what limits we should put on it.

But right now the bill that's on the floor would allow anybody under the age for 30 to invoke those provisions. And of course that's literally millions of people who would be included. I think the biggest thing that's to me the saddest about it is this has been used as more of a political football rather than an attempt to find a solution to the problem. I could probably use that description for a lot of what happens in Washington these days, but trying to do this in a lame duck session of Congress, the President wants us to ratify the START Treaty,

and there's a whole laundry list of things that the majority leader and other want us to do between now and Christmas, and it's just not going to happen.

And so there's a lot of messages I got back from November 2, but one was that my constituents, the American people, want us to know what we're doing, they want us to read the bill, right, they want us to understand what the impact is going to be, and they don't want us just moving things through just for the expediency of the moment.

So I think there's a time and place to have that debate, that discussion. I welcome it. It's not going to be easy, it's going to be really hard because you're going to make people mad on the right and the left, but I do think we have to fix it.

And I introduced a comprehensive border security and immigration reform bill in 2005 with Senator Jon Kyl from Arizona, which covered the subject really from, you know, soup to nuts, and then we had this debate in 2007. It failed because Leader Reid pulled it off the floor of the Senate.

I don't know if you've read in President Bush's book—that's President Bush, 43, George W. Bush. He talks about how Teddy Kennedy called Harry Reid, who's the Democratic leader, and said, "Don't pull this bill off the floor. Give us, you know, a few more days, over the weekend, to work this out." I think if he had, we probably could have had a bill, then we would have had the hard job of trying to reconcile it through a conference committee.

But this is right now, I think we have a public trust problem and the public doesn't believe that the federal government's doing everything is should in terms of securing the border, which it's not, in terms of creating an enforceable system which will restore respect for the rule of law. I think if we do those things, the American people are enormously compassionate, they're enormously generous, and I think these kids that you and I are both concerned about will be the beneficiary of that. Unfortunately, it just is painfully slow.

FEMALE VOICE: That are six, eight, ten kids in Portland, Oregon, that my daughter and her partner tutored to do well and get through high school, and when they get through high school and become 18, they're criminals. It gets mixed up with complete immigration change. And that's a different story than the DREAM Act. And I'd like to know if you're going to vote against the DREAM Act. Is that the case?

SENATOR CORNYN: I think I said a moment ago the last time this was before the Judiciary Committee I voted for the DREAM Act in the Judiciary Committee as part of an immigration reform bill.

FEMALE VOICE: That complicates it.

SENATOR CORNYN: Well, it's a very complicated topic.

FEMALE VOICE: I'm focusing on the kids.

SENATOR CORNYN: Well, I guess I'd have to respectfully disagree with you. Obviously—I mean as I tried to preface my remarks, these kids are not culpable. They didn't do anything wrong, but their parents brought them into the country without the benefit of complying with our immigration laws, and there are consequences associated with that, and they are suffering as a result of that decision by their parents.

Now I'm for trying to figure out some way to give them a lifeline in order for them to become productive members of American society. They're not leaving. Right? They're going and they ought to be able to finish their school and get a job. But it is part of an overall immigration issue. I guess where you and I would disagree is I don't think we can carve that one issue out.

And as far as my vote on the DREAM Act, as I told you, I voted for it in Committee, I will not vote to proceed to passing the DREAM Act in a lame duck session of Congress without dealing with the other important aspects of our broken immigration system like border security and enforcement. I think that would be a mistake.

MR. GEORGE: Not to censor anybody, do we have questions unrelated to immigration?

MALE VOICE: Senator, Mr. Bamberger spoke extremely eloquently about the need to preserve our land, to be good stewards of our land. Yet doing so is exceedingly expensive.

And we just came back from Rocky Mountain National Park, and all the rangers that we spoke to said that they don't have sufficient funds to maintain the park, let alone to improve them. Are you willing to vote funds to maintain our national parks, and indeed be good stewards of our land?

SENATOR CORNYN: Well, I think I made clear what Mr. Bamberger's done. By and large he's done it without taxpayer money, which I think is even more remarkable. And I hope is a great example. I know he's already a great example for a lot of other people to do the same within their own means.

But I think I talked about the debt and federal spending, I think you have to, again, put it in the context of the overall obligation of the federal government. I think we made some real mistakes in terms of proliferating the scope of our national park system without committing the resources in order to take care of what we have now.

I agree, they're short-funded and we need to try to find some way to address that. But I'm sorry, I can't make a commitment to raise appropriations for one segment of the federal budget without really having a better understanding of what the impact will be elsewhere.

I think, unfortunately, we're not in a position to spend more money anywhere. We are in a period of time when we're going to have to spend less money everywhere, and a period of shared sacrifice. That's my view.

MR. MCLAUGHLIN: Senator, I'm concerned about internal security of the

United States. And we've been very fortunate since the evil events in 2001 of not having suffered more. However, we've had other incidents reported. And without compromising our intelligence, could you tell us whether the risk is now greater or less and what is being done to impede these planned attacks?

SENATOR CORNYN: Well, the risk is real, and it continues, and we have been extraordinarily lucky. And not only in Times Square, but in Detroit, this Underwear Bomber as he's now come to be known, and others where we've been able to foil attacks before they've occurred, but it's sort of like the hockey goalie. You've got to stop every single one coming at you, and so far we've been very fortunate to do so.

But it raises fundamental questions, and this was part of the presidential campaign, but I think the debate continues on what our policy should be toward terrorism. Should it be to treat them as crimes, which are punished after they occur, after the bodies are there and the destruction has occurred, or should it also be viewed as an intelligence-gathering event.

I realize how controversial the detention at Guantanamo Bay has been. I've been there myself. I can tell you that it is a high quality facility and that we, I think at our own risk, deny ourselves information that we could obtain by questioning those we detained there from the battlefield trying to kill Americans, or plot and plan another 9/11. So part of it is sort of getting our brain around the new world we're living in now, which is not just strictly a law enforcement model, one that we're all familiar with where you punish after the fact, but how do you stop it before it occurs. And that puts a huge burden on our intelligence community to get the information consistent with our values as a country.

You know, one of the things that really kind of pained me during the debates in the last eight or ten years is where it was alleged that America tortured people. Well, torture is a legal definition, and I realize people use the word colloquially and not without regard to a legal definition.

But I believe the legal authorities that have reviewed what America did do under extraordinary circumstances to prevent another 9/11 attack were a matter of necessity, and I do believe they were. They did not cross that line into illegal activity because, of course, torture is illegal both to a domestic legal matter as well as a matter of our internationally treaty obligations.

All these are enormously controversial and challenging. We all sort of operate from a different information base of what the nature of the threat is, but I will tell you that the threat continues to be very real. There are people that want to kill innocent Americans, and it is the first and foremost obligation of the federal government, in my view, and I think in the view of most people, to protect the American people. And so we need to do so consistent with our laws and our values.

MR. GEORGE: Senator, the last question before we take our lunch break. I ask about patrimony as stewardship of the past and what we inherited. One of the things we inherited, and while I was in college in the 1960s, was a distribution of income whereby the amount of money held by the top 1 percent was a

relatively small fraction of the entire wealth of America. Today that has gone up 20 times since Ronald Reagan was president. We have the wealth of America predominantly in the hands of fewer and fewer people every year.

If we go look at the patrimony of America, the equality of opportunity and the equality of reality, what do you believe, if anything, we should do to try to restore an historic relative equality so that we don't continue to have a greater and greater percentage of our wealth in the hands of fewer and fewer people?

SENATOR CORNYN: Well, I think it's a question of carrots and sticks, it's a question of incentives—that any time you deal with the government, the government has the power of coercion. That's how government acts. The government forces you to act in a certain way because if you don't act in a certain way, you can be punished, even held criminally liable. Right?

So I think if we're going to be stewards, it is going to also include the sort of political and economic freedom which I've argued that we have inherited and which I believe is one of the keys to the prosperity that has lifted so many people out of poverty. And I think we need to find ways to provide incentives for those people with money to invest it in ways that will create jobs and opportunities.

And I think it's always going to be a question of risk and reward. I think the alternative is pretty ugly, which is coercive government redistribution of income, and that's why I've argued that a voluntary system of incentives that allows some individuals to become fabulously rich, but some of those individuals, I presume, will do very good things. We've had a great example of one this morning who has done very good things with the money and the success that he's earned as someone in business.

And I think some of that will be voluntary, some it will be seeking financial advantage and profit through investment and entrepreneurship. But I would argue that that is the only way that we're going to see our economy grow and jobs be created. And to me, it kind of comes down to one or the other.

Finally let me just say that the other part of this that makes it complicated is that the bottom 50 percent of wage earners in America pay about 3 percent of the income tax. One of the things the do-gooders across the board, and I would include myself in this, we thought, well, we're going to do people a favor by reducing their obligation to pay any taxes.

And this political calculation is that half of America has no skin in the game when it comes to a debate about what current tax policy should be. I think that's a terrible mistake. I think everybody ought to have some skin in the game and some obligation, because we're all in this together.

I think you raise a legitimate concern. Obviously if there is a huge gulf between those who have nothing and those who have everything, from a material standpoint, that's a recipe for civil unrest and worse. I don't think we are there in America because I think even the poorest people in America still live a life of relative prosperity compared to places that you and I and others have visited around the world that have nothing.

MR. GEORGE: One of my favorite questions I've always asked people like John is when I was a college student at the University of Texas, I could go to law school for \$50 a semester, and I worked my way through school doing minimum wage jobs at a dollar and a quarter an hour. It costs \$20,000 to go to the University of Texas Law School now, and I believe the minimum wage is \$5.70 an hour. You can't get there from here now.

The opportunity that the relative equality of wealth in the Eisenhower administration and the Nixon administration was generated largely by open access to higher education and fully-funded, state-funded public education where the local districts put in much less of the money than they do now. What do we do, or do we do, is it a good idea to restore that relative opportunity to pick one's self up by working minimum wage jobs and putting yourself through college, which can't be done anymore. Do you think that's a good idea or a bad idea?

SENATOR CORNYN: I can't wait for the hard questions. Well, what you describe, I'm the parent of a woman, a young lady who graduated from law school a year ago, and she borrowed a heck of a lot of money, and she's going to have to spend a long time paying it off. Thank goodness her mother and I are not. She's going to have to pay it off using the wages she's earning as a new lawyer.

But what you describe is real, it's a real problem. But I think, you know, we need to figure out some way to get people access to good quality education. Obviously K through 12 we understand, that is a fundamental obligation. Beyond that, it seems like in some circles it's viewed as almost discretionary whether we do that.

But given the fact the world is changing so much, and all of us probably during the course of our lives are going to move from different jobs to different jobs to different jobs, we're going to have to learn and acquire new skills and abilities to support ourselves and our family. We have to continue with a regimen of life-time learning. How we finance that, how we provide that is a hard question and not easily answered.

But I don't think we have any choice but to continue to provide people access to education because otherwise we will not be able to compete in a global economy; America will not be the kind of country that we inherited from our parents and grandparents.

FEMALE VOICE: I have thought that Shrub Kempner had a very good point. How can we not raise taxes to help us? We are in a very economically terrible situation with our deficit growing. The only thought I've had with the carrot and stick idea, why not go ahead and raise taxes on the wealthy, but give them the opportunity to take full benefit of contributions. In other words, let your contributions be taken off of the top line. If you want to contribute a million dollars, then you get to take that million dollars off the top line. And to increase and encourage the wealthy to pay for more of the needs in our country. That's the only thought I had.

SENATOR CORNYN: I think that's an idea that bears some discussion. I'd say from my part, I don't think it's a question of whether we pay enough taxes, I think it's the federal government spends way too much money, and we're going to have to cut down on the spending to get it more consistent with our revenue.

MR. GEORGE: Senator, thank you very much. I want to thank everyone with the good questions, and everybody's participation. We will resume after lunch.

STEWARDSHIP OF THE EARTH

Global Warming and the Man's Effect on It—Or Not

SESSION INTRODUCTION AND MODERATOR OF PANEL DISCUSSION
MARY ANN RANKIN

MR. GEORGE: Ladies and gentlemen, the future of the earth is in a questionable state today. We're going to talk about one of the more critical problems in America and the world today at this session: the stewardship of the earth, global warming, and man's effect on it, or not.

We have with us Mary Ann Rankin, who many of you know, is the dean of the College of Natural Science at The University of Texas. She has been in that job 14 years, something like that, a good number. She looks like she's 22, but she has actually been in that employment job for a long time. She graduated from LSU with an undergraduate degree. She got a Ph.D. in Iowa, a post doc at Harvard, then involved at UT Austin. She is a member of the American Association for the Advancement of Science. She's a leading scholar in the areas we're talking about. And she, or Mark, got two more people to participate in this who are truly outstanding.

Richard Lindzen is the Alfred P. Sloan professor of meteorology at MIT. He has a Ph.D., a master's in science, a bachelor's degree, all from Harvard, and despite that he has achieved great things in the world of science. And he is one of the leading scientists in the world on meteorology and global warming and the issues surrounding it.

Richard Orbach is the professor and director of the Energy Institute at the University of Texas. He served in the Department of Energy as the undersecretary for science; in 2006, he was the chief scientist for the Department of Energy. He is an active and knowledgeable expert in the areas that we're going to be talking about, and that is in terms of stewardship the effect of our use of resources on the climate of the earth and, if it is, what is happening to it, whether it's warming.

If it's warming, is that a product of the conduct of human beings, and will we know the answer for sure about the effect of human activity in releasing hydrocarbons in the atmosphere through grain coal and natural gas and petroleum, whether that is or is not causing or affecting global warming in a cosmic sense in time for us to decide that we can do something about it, and then do something about it.

When Mark asked me to talk about this topic and the uncertainty of science

about the effect of human activity on global warming, I was reminded about when I was a boy there was a great deal of dispute about whether cigarette smoking caused cancer. Some people betted that science was going to come out that it didn't, and they kept smoking, and some people dealt with the uncertainty by quitting smoking. The ones who quit smoking in the face of uncertainty turned out to be better rewarded.

The question we have here is, can we wait till we know for sure before we make a try to make effective answers, and the second question is, is it already too late, if we are causing it, to change it.

Dean Rankin, I'll let you take it from here.

DR. RANKIN: Thanks, Jim. In spite of what Jim said, this is actually not my area of expertise. I wish it were. But I'm a biologist, I actually work on insect migration. And my colleagues and I have seen what appears to be the consequences of global warming in things like changes in species range and a real change in species distributions and diversity and so on that seem to be the result of global warming. And I frankly, until I became dean, was just assuming that global warming was occurring, it was due to CO₂, as the media seemed to be saying, and that, you know, this was something that was a scientific certainty. When I became dean I got to be more familiar with other disciplines of science, and also with an advisory council that have very well-informed people, as you are, on it, who held quite different opinions. And I have to say, it was a real eye opener to me. And as I started to look personally at this issue, I realized that it's very complex. The data are very difficult to gather and analyze, and there are very strongly held opinions inside the scientific community about some of these issues. And so it really takes study to understand what's going on.

And we have two people this morning who have studied it, who know a great deal about it, and I think we're very privileged to be able to hear this discussion this morning. I was saying to somebody earlier today, I wish that we were taping it because I'd like to have the opportunity to go back and listen to it again, because I know it's going to be wonderful.

So stewardship of the earth, global warming and man's effect on it, or not, that's our topic. We have Richard Lindzen and Ray Orbach here, as I said, great authorities. I just thought I would try to frame the issues a little bit, and then get out of the way because these are the experts, not me, and I know we will all really enjoy hearing from them, more than you'll enjoy hearing from me.

But, you know, some of the issues here that are confused, or some of the things that have confused the issues, I think people confuse what's happening in the weather sometimes locally with global climate change. They try to confer causality instead of what is really correlation, and use this as evidence to support one view or another that is being touted in the media. Climate change has become highly politicized, so there are consequences of espousing one view or another, even based on real data. It is a temptation, then, to espouse a view in spite of data or without data. And I think even some of the scientific community has been guilty of that, and that's a very dangerous trend.

Politicization of scientific findings and scientific dogma is a very bad thing,

for the country, for policy makers, and for science and scientists. The media has added to the confusion, of course. Once anything has a political bent to it, then it's spun in the media to add zest.

Government policy decisions can create incentives that can have great economic consequences, and once you start down that pipe, then pulling back from it can be very difficult, and I think this adds additional confusion to the whole picture, so people are then even more unwilling to change their mind based on data, or whatever.

And the public has come, I think as a consequence of this debate, to somewhat distrust science and scientists, and I think that's almost the worst outcome. We need to do a better job of being very careful about what the data really tells us, and then communicating that effectively, and then making really good policy decisions.

But we don't always have these choices, again, in that kind of time frame. So is global warming real? There is a graph you see published everywhere, and it shows the average change in surface temperature from 1880 until now. And it looks as though, yes, in fact, we're really getting warmer. If you stand back from that and look at this over an even longer period—from 1400 forward, you can see some pretty dramatic fluctuations, but it does indeed look like the earth is getting warmer. But if you take an even longer view and look over the last million years, or even less than that, there have been huge fluctuations. So are we really getting warmer in a way that will make a big difference? Yes, we're getting warmer, but what does it mean? And is this something that's going to come back into balance? If global warming is occurring, is it carbon dioxide that is responsible for it? If that's true, is it the carbon dioxide that is being produced because of human activities, or not? But what about all the other factors that could impact global warming, volcanic activity, aerosols in the air, water vapor, clouds, fluctuations in the earth's axis, and solar radiation variance. Those are a lot of factors. Are we the ones causing it, or is this at least partially a natural phenomenon that's going to come back into balance?

Another thing is, a lot of the theories and predictions have been based on simulation models. That is where you take data and you give it to a computer with a complex program and the computer tells you what to expect in the future. The worth of that kind of analysis depends greatly on having the right assumptions to begin with, and the right data that you feed to the computer to begin with.

Have we done that? Have we made the right assumptions? The whole point of doing a model is usually to simplify enough of a complex situation so you can understand it and then maybe make predictions. But if you get it too simple or you leave out some major factor, that's going to really skew the outcome so the model doesn't mean anything. How good are our models?

But the big question for me personally as a scientist is, what actual experiments, or observations do we need to do in order to really get good data and get the right models and get the right answers and make the right predictions to inform policy? Is it even possible? But what do we do next? Let's get some real direction here, and action items that will result in the best outcome. What

should the government do? Policies based on incomplete data or incorrect conclusions can be extremely disruptive, can have big economic consequences that almost seem nuts in retrospect, once you finally get the right answer.

But on the other hand, as Jim just said, can we afford to wait? Maybe we have to do something just in case, because it could be such a dire outcome. I don't know. But I think these guys might know.

HOW TO DEAL WITH THE SCIENCE

RICHARD LINDZEN

Dr. Rankin: Please help me welcome our first speaker, Richard Lindzen, to the podium. He is a very distinguished scientist from MIT, a member of the National Academy, and has been working on this question for most of his academic career. Thank you for coming here and being with us, Dick, we look forward to your remarks.

DR. LINDZEN: I want to thank Mark for inviting me and thank Jim and Dean Rankin for the nice introductions. It's a pleasure being here in Texas. As has been mentioned, this is a complicated and polarized subject. It's also one which is a little peculiar in another sense. What I've discovered is that very few people speaking about this issue actually know what the debate is about. I'll try and clarify this in the talk, hopefully successfully, but with some doubt about that. But let me state one thing right off the bat, the debate is not about whether it is warming or not, or even about whether man is contributing some portion of whatever is happening. The issue is about how much and what relation it has to catastrophe. I'll try and explain this in the lecture, though, as I think Dean Rankin mentioned, a lot of the confusion is, in fact, explicitly due to members of the scientific community whose role as political partisans has dominated any other role they may be playing.

Here are two statements that the UN's intergovernmental panel on climate change pretty much agrees to, and I think it's rather important to be aware of them.

1. A doubling of carbon dioxide in the atmosphere by itself contributes only about one degree centigrade to greenhouse warming.

It's not a lot. It turns out that all the models project more and that is because within the models there are positive feedbacks from the more important greenhouse substances which are water vapor and clouds. Now by feedback I simply mean a process which amplifies, or reduces, a forced event. So for instance a positive feedback will take that one degree and amplify it; a negative feedback will make it smaller. The feedbacks are considered to be uncertain.

2. If one assumes that all the warming over the past century is due to man's contributions to greenhouse forcing, then the estimated sensitivity of the climate to a doubling of carbon dioxide is less than one degree.

Now you might reasonably ask then, how is it that models that have higher sensitivity can be made consistent with the observed warming? They do so by arbitrary adjustment factors. Now those factors are given names, aerosols and solar variability. But if you look, each model uses a different value for these things because the values are basically unknown at present.

Now, given these things, I think the notion that alarming, and I emphasize alarming, warming as settled science I think should be offensive to any sentient individual, even though these facts are not emphasized in the various documents.

As has been pointed out, the usual rationale for alarm comes from models. The notion that models are our only tool, even if it were true, depends on models being objective and not arbitrarily adjusted. Unfortunately, they always are adjusted. Fortunately they're not our only tool, and I think as Dean Rankin mentioned and I'll come to later, there are observations that can usefully settle the issues, or at least improve our understanding.

Models themselves are not useless. They can show why they get the results they get, and usually the reasons involve physical processes, and these processes can be independently assessed by both observations and basic theory. This has been done, and there's a lot of argument about it, and I will argue that the results do suggest that all models are significantly exaggerating warming. There's limited time and this is a technical subject; I'll try to get to some such studies, but we'll see.

Even apart from the science, there are many reasons why intelligent laymen should be suspicious. In science, the claim of incontrovertibility is always suspicious. It just doesn't exist. I have to say, I get into trouble very frequently over the issue of tobacco, first as a smoker, but the second, it's a kind of third rail. I've always wondered—and I've never been paid or anything—why would the tobacco industry be interested in my support, but I've been accused of that. The fact that the extreme danger of tobacco is treated as incontrovertible, and cannot be questioned or even asked about, I think sets a very bad precedent, and in that sense I think the issue is unfortunate. And the second point is, arguing from authority without giving scientific reason, meaningful data or even using elementary logic, is always something to be suspicious of.

Here's something that has just come up, and I think we'll spend a little time on it. What is the definition of global warming? What is its quantification? If you hear it spoken of without definition or quantification, you should be worried. Then one comes to consequences like changing habitat for various species, sea level, and so on. These are all very important things, but if you look at them, they are phenomena that have a large multiplicity of causes, and global warming is usually not even at the top of that list. To use these as "proof" of global warming is guilty of something that is occasionally called the prosecutor's fallacy, and I'll come back to that.

The worst, perhaps, is the conflation of the existence of climate change with anthropogenic or manmade climate change. The earth is always changing in its climate, and contrary, I suppose, to what Dean Rankin mentioned, the earth is never in equilibrium. It's not as though it's a delicately balanced system that's

always been in equilibrium and we've upset it. It's never in equilibrium. An example to think about, and it's very relevant to this—Al Gore uses it commonly—is body temperature. We have a system that thermostatically controls our body temperature. We all know that doesn't mean our temperature is constant. For a normal healthy individual, it fluctuates, and the only way you can maintain constancy is by adjusting the fluctuations back and forth. Same thing with a skyscraper; you would never construct a skyscraper that doesn't wave in the wind a little bit, because then it would snap.

Some salient points to amplify on these a bit. Nothing in science is incontrovertible, and that's especially true in a primitive and complex field like climate. As I've said on other occasions, incontrovertibility belongs to religion, and it's referred to as dogma.

The value of authority is of dubious value. One really has to deal with the science itself. Now, this is an issue that is punchy in a sense. There was a political scientist, Aaron Wildavsky. I don't know if any of you ever heard of him, he died some years ago. He wrote a book shortly before he died called *But Is It True?* and in it he argued that when you come to environmental issues, and you're a citizen, you're not a scientist, how do you deal with it? His conclusion was, you better bite the bullet, go to the technical literature and spend a hundred hours finding out about it. It's the only way. He did it as an experiment with his grad



LETTERS

edited by Jennifer Sills

Climate Change and the Integrity of Science

WE ARE DEEPLY DISTURBED BY THE RECENT ESCALATION OF POLITICAL ASSAULTS ON SCIENTISTS in general and on climate scientists in particular. All citizens should understand some basic scientific facts. There is always some uncertainty associated with scientific conclusions; science never absolutely proves anything. When someone says that society should wait until scientists are absolutely certain before taking any action, it is the same as saying society should never take action. For a problem as potentially catastrophic as climate change, taking no action poses a dangerous risk for our planet.

Scientific conclusions derive from an understanding of basic laws supported by laboratory experiments, observations of nature, and mathematical and computer modeling. Like all human beings, scientists make mistakes, but the scientific process is designed to find and correct them. This process is inherently adversarial—scientists build reputations and gain recognition not only for supporting conventional wisdom, but even more so for demonstrating that the scientific consensus is wrong and that there is a better explanation. That's what Galileo, Pasteur, Darwin, and Einstein did. But when some conclusions have been thoroughly and deeply tested, questioned, and examined,

they gain the status of "well-established theories" and are often spoken of as "facts."

For instance, there is compelling scientific evidence that our planet is about 4.5 billion years old (the theory of the origin of Earth), that our universe was born from a single event about 14 billion years ago (the Big Bang theory), and that today's organisms evolved from ones living in the past (the theory of evolution). Even as these

is nothing remotely identified in the recent events that changes the fundamental conclusions about climate change:

(i) The planet is warming due to increased concentrations of heat-trapping gases in our atmosphere. A snowy winter in Washington does not alter this fact.

(ii) Most of the increase in the concentration of these gases over the last century is due to human activities, especially the burning of fossil fuels and deforestation.

(iii) Natural causes always play a role in changing Earth's climate, but are now being overwhelmed by human-induced changes.

(iv) Warming the planet will cause many other climatic patterns to change at speeds unprecedented in modern times, including increasing rates of sea-level rise and alterations in the hydrologic cycle. Rising concentrations of carbon dioxide are making the oceans more acidic.

(v) The combination of these complex climate changes threatens coastal communities and cities, our food and water supplies, marine and freshwater ecosystems, forests, high mountain environments, and far more.

Much more can be, and has been, said by the world's scientific societies, national academies, and individuals, but these conclusions should be enough to indicate why scientists are concerned about what future generations will face from business-as-usual practices. We urge our policy-makers and the public to move forward immediately to address the causes of climate change, including the unrestrained burning of fossil fuels.

We also call for an end to McCarthy-like



Figure 1

students. It's a good set of articles in the book that present the results of his students' efforts.

But it's sometimes not that hard, and I'll give you an example where laymen can check for themselves. I'm showing is a letter that was sent last spring to the magazine, *Science* (Figure 1). It was signed by 250 members of the National Academy of Science.

Most of the signers had no background whatever in climate science. Several of the signers are notable environmental activists, like Paul Ehrlich, George Woodwell, Don Kennedy, and there were a few who were legitimate scientific contributors. Two assertions were made in that letter. One of them was, "Natural causes always play a role in changing earth's climate, but are now being overwhelmed by human-induced changes." The other was, "Warming the planet will cause many other climatic patterns to change at speeds unprecedented in modern times, including increasing rates of sea level rise and alterations in the hydrological cycle."

Now, it turns out one of the signers was a colleague of mine, Carl Wunsch, and in a 2007 paper, and repeated a couple of weeks ago at a departmental lecture, is his take on this. "It remains possible that the database is insufficient to compute mean sea level trends with the accuracy necessary to discuss the impact of global warming, as disappointing as this conclusion may be." Now, the syntax is strained but he's saying we don't have the data.

What you can sometimes do, and what Wildavsky recommended, is go to the scientific lecture and see whether the authoritative assertions are any more credible than that Photoshop picture of the polar bear that accompanied the original article. This is not a real photograph.

In any event, what is global warming? It turns out, and I notice it here today, people refer to it as global mean temperature. But if you look at the axis, it says global mean temperature anomaly. Now, what that means is, if you average temperatures all over the earth, you'd get gibberish. It doesn't make any sense. It's like averaging phone numbers. What you do instead, which is somewhat better, is at each station you take the average for a 30-year period and just plot the deviation from the average at each station. Then you average those deviations, the anomalies, and you get the global mean temperature anomaly.

It's highly uncertain. What happens is the deviations at each station, when you plot them and form a cluster of points over a large range, there doesn't seem to be anything in that. Then you average it and you get a tiny residual. Those of you who work with numbers know when you take the small difference of large numbers, it's always dicey. But taking that, you get changes on the order of three-quarters of a degree centigrade over the past 150 years. This level of variability I would suggest is always present, and in general, a priori, you don't need a cause for it. It's on the level of the fluctuations of your body temperature.

The system itself is never in equilibrium because you're talking about the surface, where the oceans are carrying heat from the deeps to the surface and back again. The surface can never be in equilibrium with space because there is storage in the ocean. That's understood. There are other sources of variability

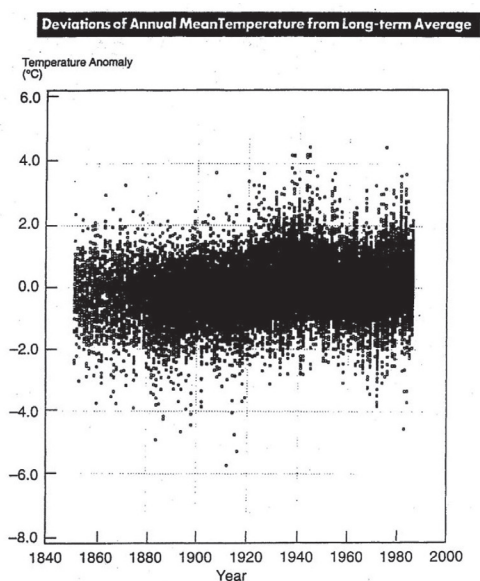


Figure 2

1. Data points averaged to obtain time record of global mean temperature. Note points range from less than -2C to more than +2C.

Source: S. L. Grotch, Lawrence Livermore Laboratory, Livermore California

Globally Averaged Deviations from Average Temperature Plotted on a Scale Relevant to the Individual Station Deviations

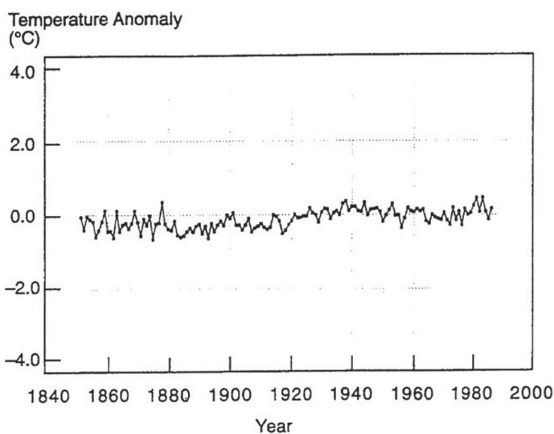


Figure 3

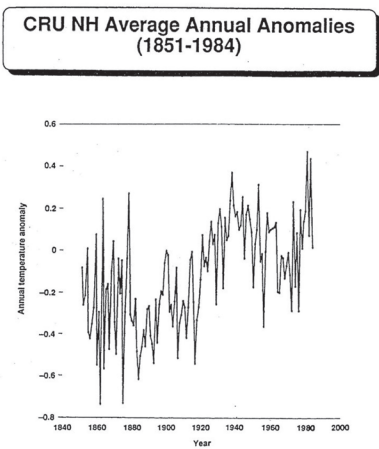
also, but these tend to be less well known, not that the ocean is particularly well known.

Because the quantity we're looking at is so small, and the error bars so large, though seldom reported, this is an easy quantity to abuse in a variety of ways. This is the data that goes into the global mean temperature anomaly (Figure 2)

Each point here is the temperature anomaly at a station, and what you see is a cluster of points. There doesn't seem to be any gap in it, and the important

thing to look at is the range. We're going from minus two to two degrees centigrade. Each interval is two degrees centigrade, a little less than four degrees Fahrenheit.

Then you average these points, and as you can guess, it looks like it's even, plus or minus, and so you get this (Figure 3). Normally when you look at that you'd say that's just noise about zero; that isn't very spectacular looking. So what do you do? Well, you change your interval from two degrees to .2 degrees. In other words, you blow it up. And now you get this (Figure 4), but you now see large changes. Well, not large; large in the sense that the *Wall Street Journal* or the daily newspaper presenting the Dow Jones shows the same graph whether it went up two points or 200 points.



3. Curve in previous figure stretched to fill graph. Note that range is now from about -0.6C to +0.3C.

Figure 4

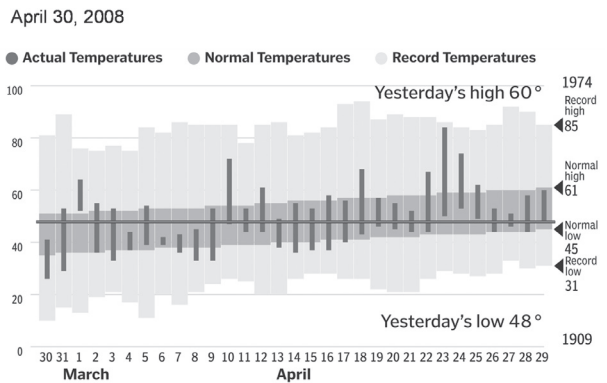


Figure 5

Now this is a diagram that appears in the *Boston Globe World* every day (Figure 5). This one I took from 2008. It doesn't matter; pick any date. What is shown is for a given day and the 30 preceding days, the high and low temperature of the day, the average high and low temperature for the day, which is the dark gray, and the record-breaking highs and lows for the day, which is the light gray.

It's April, so you see an upward trend because you're going from winter to summer. Then you have this red line in the middle, and the question is, what is that red line? Well, it's a line whose thickness represents the range of global mean temperature anomaly over the past century. Just to put it in perspective, when you speak of global warming, that's what you're talking about in terms of your daily experience.

Let me get something straight immediately. The claims that the earth has been warming, that there is a greenhouse effect, and that man's activities have contributed to warming are trivially true and essentially meaningless in terms of real concerns. Here one gets into a profound difficulty because it's these things

that I regard as trivially true and largely agreed on that are trotted out when the public is told to believe that global warming is a serious thing here. They are separate from that.

Recently there was a well-publicized letter by Hal Lewis, who's a distinguished physicist at the University of California, Santa Barbara, and he was resigning from the American Physical Society over their statement concerning global warming. I won't go through his letter, but the American Physical Society responded and its response was, on the matter of global climate change, "APS notes that virtually all reputable scientists agreed with the following observations: carbon dioxide is increasing in the atmosphere due to human activity, carbon dioxide is an excellent infrared absorber, and therefore its increased presence in the atmosphere contributes to global warming." Then they add, "The dwell time of carbon dioxide in the atmosphere is hundreds of years. On these matters APS judges the science to be quite clear."

Actually the last item is quite misleading in its own terms, but the other items are all part of the trivial points of agreement. They deny financial involvement, and yet the chair was a man who, in fact, chairs the Carbon Mitigation Initiative and is an advisor to Deutsche Bank on green investments. There's basis for worrying about science.

It seems to me two questions are really important: what magnitude of warming do you really expect and what is the relation of warming of any magnitude to the various projected catastrophes, such as Al Gore famously shows in his slide show? When it comes to unusual climate, it is always occurring someplace. The US Weather Bureau, since 1950, has a monthly publication on extreme events for that month; it always runs about 100 pages a month. You know, if you want to make a scare story, you go to that magazine, you pick it up and you think how could this happen without the world being near its end?

The prosecutor's fallacy in its simple form consists in saying that, if A shoots B, there is near certainty that there will be evidence of gun powder on A's hands. And to then conclude that if C has evidence of gun powder on his hands, C shot B, which is clearly untrue. With global warming, the line of argument is even sillier. Generally it amounts to something like if A kicked up some dirt leaving a dent in the ground into which a rock fell, and B tripped on this rock and bumped into C who was carrying a carton of eggs, which fell and broke. If, then, if some broken eggs were found, it showed that A had kicked up some dirt. Policy these days is to go further and decide the best way to prevent broken eggs is to ban dirt kicking.

Now turning to the science, there is the issue of questionable data. This always sounds strange to people because there's a kind of sacredness attached to data. In the case of climate, the data is rarely a precise measurement. It's rather a collection of thousands of measurements made under very uncontrolled circumstances for totally different purposes and there's subsequent analysis with lots of room for subjectivity.

There was the climate-gate incident where emails were released, and it made it unambiguous that people were tilting the scale. We have a field in which whenever there is a conflict between models and observations and it's published,

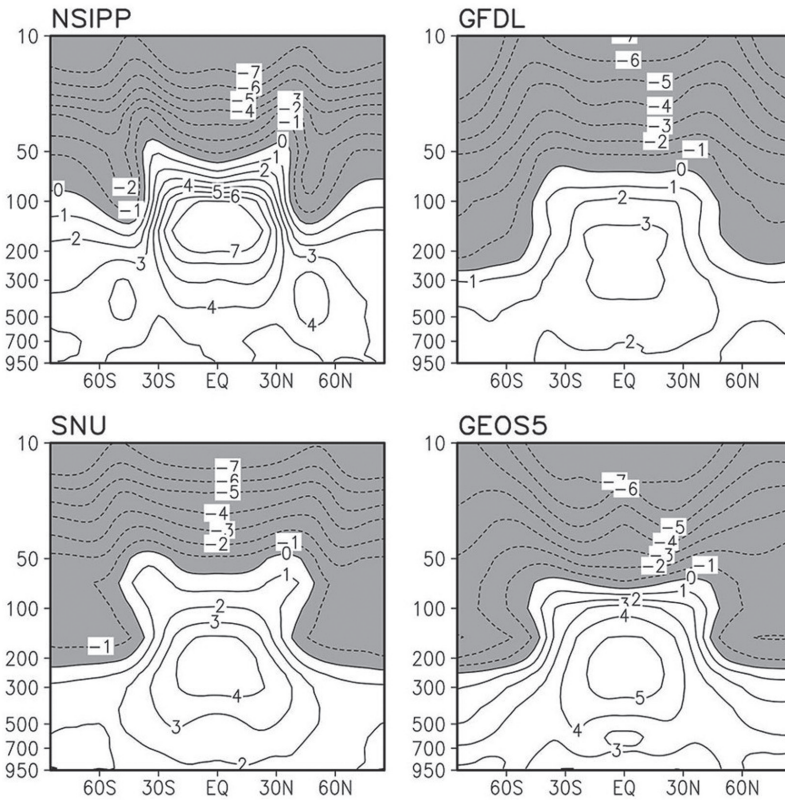


FIG. 14. Zonal-mean distributions of temperature change ($2 \times \text{CO}_2 - \text{Control}$). Units are kelvin.

Figure 6

you know that within two months an article will appear that the data has been corrected. It's a unique field in this respect. But the problem I have with it is, the small changes in temperature are not abnormal and they're consistent with low climate sensitivity, but somehow the public has been misled to believe that whether it is warming or cooling, no matter how little, is itself of vital importance. That means that even though I don't think tilting the record has much impact on the science, it is of great importance to public perception. I don't quite know how to deal with that.

There is more sophisticated data being analyzed, and it's a field where the words themselves suggest a problem. One takes data these days to validate rather than test models. It's the wrong way. One really should be seeking to test the models and see when they're wrong, not to prove them right. I will give a subtle example, and it's probably too subtle for an after lunch talk on when we know the data has to be wrong. This is an issue of physics and it's a case where the models are right. These are pictures of what's called a meridional cross section (Figure 6). The horizontal axis is latitude; the vertical axis is pressure height levels.

What is shown is the response to a doubling of CO_2 for various typical mod-

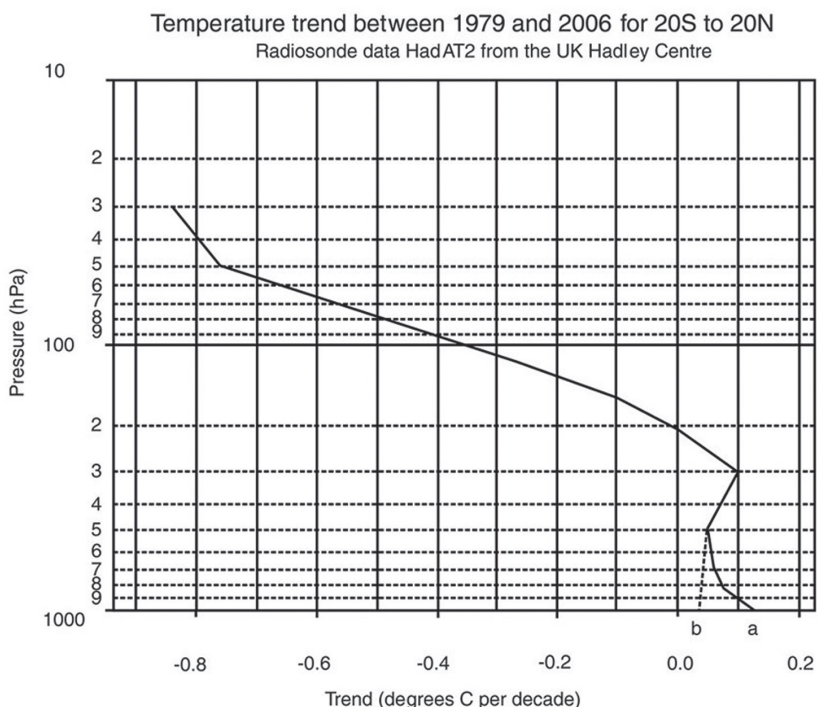


Figure 5: Temperature trend as a function of pressure level for period 1979–2006 in the tropics (20S–20N) based on balloon data analyzed by the Hadley Centre. ‘a’ shows the observed trend at the surface. ‘b’ shows that part of the surface trend that can be attributed to greenhouse warming.

Figure 7

els, and what it shows in all the models is the temperature response is biggest over the tropics and the upper troposphere, let’s say around 10–12 kilometers. None of the data show this, and yet we know this has to be correct. It is a property of what is called convective dynamics. We know that temperature must behave the way the models are showing. It’s not because the models show it, it’s because there’s a basic underlying principle.

This is a profile of what the observations show, and they actually show this little point A, that the trend at the surface is bigger than it is in the upper troposphere (Figure 7). That is physically impossible. One of the two data must be wrong, and if it is the upper troposphere, it has to be wrong by a great deal, at the surface less so. But if it’s the surface that’s wrong, then the trends over the last 30 years are exaggerated by about a factor of three. That can happen.

Now, sensitivity is a crucial issue and you can’t determine it by assuming you know what causes the change, because then if it doesn’t, if you’re wrong, you

What's happening to the climate is unprecedented

Print

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From Prof Martin Rees and Dr Ralph J. Cicerone.

Sir, We were stimulated by your editorial "Cooler on warming" (April 5). There has undoubtedly been a shift in public and media perceptions of climate change – a consequence of, at least in part, leaked e-mails from some climate scientists and the publication of errors in the fourth Intergovernmental Panel on Climate Change report.

However, as your editorial acknowledges, neither recent controversies, nor the recent cold weather, negate the consensus among scientists: something unprecedented is now happening. The concentration of carbon dioxide in the atmosphere is rising and climate change is occurring, both due to human actions. If we continue to depend heavily on fossil fuels, by mid-century CO₂ concentrations will reach double pre-industrial levels. Straightforward physics tells us that this rise is warming the planet. Calculations demonstrate that this effect is very likely responsible for the gradual warming observed over the past 30 years and that global temperatures will continue to rise – superimposing a warming on all the other effects that make climate fluctuate. Uncertainties in the future rate of this rise, stemming largely from the "feedback" effects on water vapour and clouds, are topics of current research.

It is the responsibility of scientific organisations like ours to present the public and politicians with a balanced assessment of the evidence – and, importantly, to indicate the level of confidence and the range of uncertainties attached to them.

Our two science academies have long contributed critical, objective and open reports on climate change. We intend to draw upon the efforts of leading scientists everywhere to make our future reports more accessible and valuable and, by fostering scientific research, we hope to do a better job of reducing inherent uncertainties. We must also promote best scientific practice, especially with regard to the sharing of data. But policymakers and the public must realise that, even if scientific uncertainties could be reduced to zero, formulating effective political responses would still be controversial and challenging. Our academies will provide the scientific backdrop for the political and business leaders who must create effective policies to steer the world toward a low-carbon economy.

Martin Rees,
 President of the Royal Society

Ralph J Cicerone,
 President of the US National Academy of Sciences

Figure 8

end up getting infinite sensitivity. You can't test it by comparing models with models. They're not basic physics. Yet these are part of the authoritative UN, IPCC, National Academy and other reports.

Here is a recent letter signed by presidents of both the Royal Society and the National Academy, and let me take three items out of this letter (Figure 8). One is it's referring to an editorial in the Financial Times, "However, as your editorial acknowledges neither recent controversies nor the recent cold weather negate the consensus among scientists something unprecedented is now happening. The concentration of carbon dioxide in the atmosphere is rising and climate change is occurring, both due to human actions."

The statement goes well beyond what the UN says. They only said that man is responsible for more than 50 percent of the change in the last 50 years. They don't emphasize it, but aerosols have to be included to cancel much of the excess warming in models. Moreover, it assumes that the models handle all natural

internal variability and that was acknowledged to be false almost immediately.

You could parse this sentence and say, you know, perhaps they meant that the increasing CO_2 is due to man and there was warming due to this, even though it might be a small part, but I don't think that's what they intended.

Now you come to their second statement: "Uncertainties in the future rate of this rise stemming largely from feedback effects on water vapor and clouds are topics of current research." How would you guess from this throwaway comment that the feedbacks are, in fact, the critical issue? Without strong positive feedbacks, there would be no cause for alarm and no need for action. What Reese and Cicerone are actually saying is we don't know if there is a problem.

And then they conclude with this sentence: "Our academies will provide the scientific backdrop for the political and business leaders who must create effective policies to steer the world toward a low carbon economy." Reese and Cicerone are saying that regardless of the evidence, the answer is predetermined. If the government wants carbon control, that is the answer the academies will provide. Nothing could better epitomize the notion of science in the service of politics, something that unfortunately has characterized in so-called climate science.

Where do we go from here? Given that this has become a quasi-religious issue, it's hard to tell. My personal hope is that we'll return to normative science and try to understand how climate actually behaves. Our present approach in dealing with climate is completely specified by a single number, globally averaged surface temperature anomaly, which is forced by another single number, atmospheric CO_2 levels which clearly limits our real understanding. It's a horrible over-simplification.

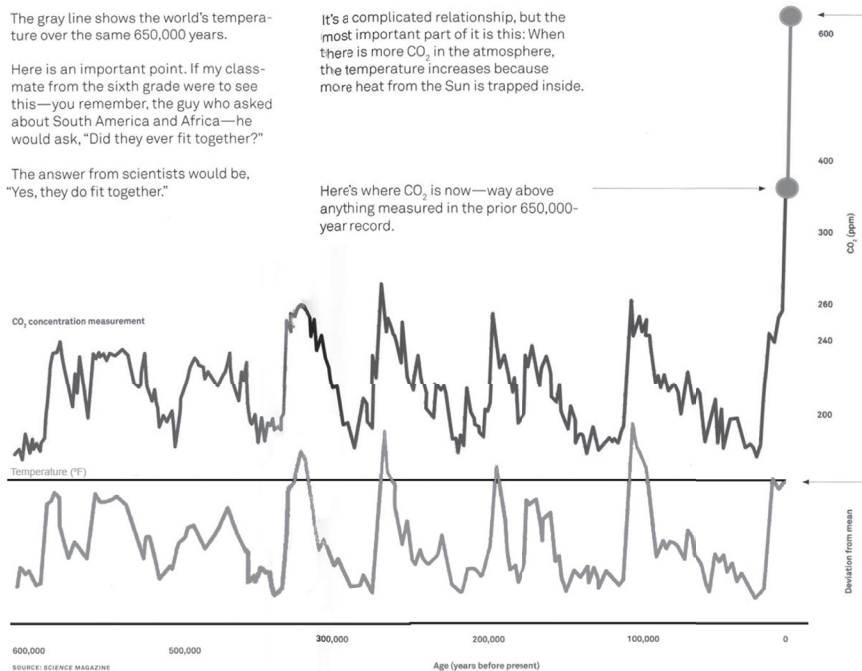


Figure 9

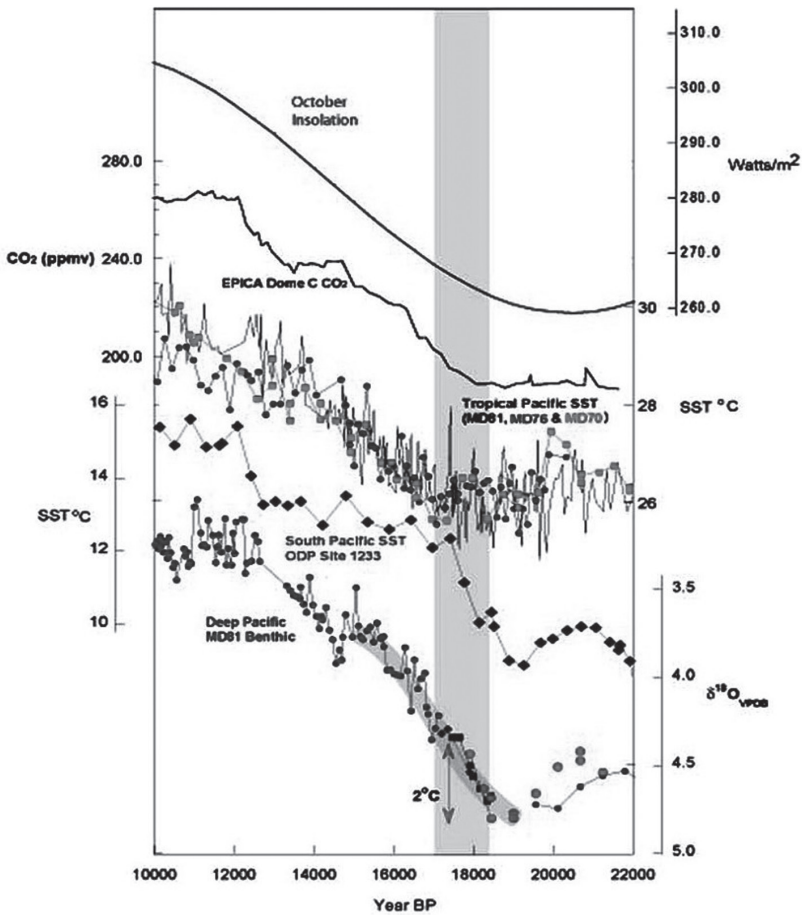


Figure 10

There has been progress. It's been slow. We have been able to account for the cycles of ice ages, simply with orbital variations. Independent tests of sensitivity show that the assumption that warming is due to CO_2 is only limitedly true. The sensitivity is relatively low. In general, I think independent studies show that clouds and water vapor are mostly a negative feedback rather than a positive feedback.

There's obviously not time to go through all of this. There are some peculiarities, for instance there is the famous graph relating one number for climate (mean temperature) to CO_2 . This graph was made famous by Al Gore's picture from the Vostok ice core, or the EPICA C core (Figure 9). There is the issue of confusing causality with correlation, but there are a lot of other problems with it. It shows that temperature preceded CO_2 by hundreds of years, at the last glaciation. It also shows that previous interglacials were warmer than the present.

The biggest problem, I think, was the use of the single number. In the next slide, and that's the last one I'll show, is a recent study from the University of

Southern California (Figure 10). You know, essentially the last de-glaciation, which began somewhere around 19,000 years ago, at that time the earth was not ice covered but you had the Laurentide ice sheet, the Fennoscandian ice sheet. The first thing that happened was in the South Pacific, in the region of formation of deep water around Antarctica. It began warming between 19,000 and 17,000 years before present.

Then the tropical surface water began to warm and the CO₂ went up. Greenland did not begin to warm until 15,000 years before present. The sequence suggests a physical process of great interest and complexity. But it's totally missed on the picture of just global mean temperature anomaly and CO₂.

The curious thing is that anecdotes are important. This is the funniest of them: "The Arctic Ocean is warming up, icebergs are growing scarcer, in some places the seals are finding water too hot; reports all point to a radical change in climate conditions and hitherto unheard of temperatures in the Arctic zone; expeditions report that scarcely any ice has been met with as far north as 81 degrees 29 minutes; great masses of ice have been replaced by moraines of earth and stones; at many points well-known glaciers have entirely disappeared." The trouble with this is it's from the US Weather Bureau 1922.

Thank you.

HUMANS ARE THE CAUSE OF GLOBAL WARMING

RAY ORBACH

Dr. Rankin: Now I'd like to ask Dr. Orbach to give us his perspective on these questions. Ray was, until recently, Undersecretary of Energy at DOE, as the first Undersecretary. I think he was in charge also of the Office of Science at DOE. Prior to that he was in academics. He was chancellor of UC Riverside, and provost at UCLA. So he's had a distinguished career, both in government and academia, and has looked at this issue from lots of different sides. Ray, thank you.

Dr. Orbach: Thank you, Mary Ann. I'm going to try to limit my remarks because it is important that you have a chance to ask questions to those of us up here. First I would like to thank the Philosophical Society of Texas for inviting us. It's a great pleasure to be here and to be with so many of you last evening and this morning talking about really major issues. I thought both talks, both talks this morning laid it out pretty clearly in terms of stewardship of resources. I'm going to talk about the stewardship of the earth, which is pretty big. If we're dealing with an issue that will fundamentally change the nature of our globe, it may be prudent to take action, not precipitate action, not violent action, but prudent action.

What you're dealing with in this discussion is your globe, the only one we have, and the issue is can mankind deal with the changes that appear to be taking place in a prudent and sensible fashion for the future of not only our children and grandchildren, but indeed, in my view, the very existence of human life on the planet.

I want, since this is a philosophical society, to refer you to Mark Twain's wonderful comment: "It's what you know for sure that just ain't so that catches you." And on this issue it can be on both sides. What I'm going to do, as Professor Lindzen recommended, is to allow you to make up your own mind. So I'm going to show you two figures, and you decide. The first one, Fig. 1 is from 300 scientists from 48 countries. This is taken from BAMS, the Bulletin of the American Meteorological Society. And it points to 10 different measures of warming, not a single number. What I want you to do is to look at the horizontal axis to see the range of years. It was interesting that in six of the curves, the very small changes stopped at 1840. We're talking about more recent measurements, and there's a reason why. The upper layers of the ocean are very slow to react to atmospheric temperature changes. The first roughly 100 meters take roughly

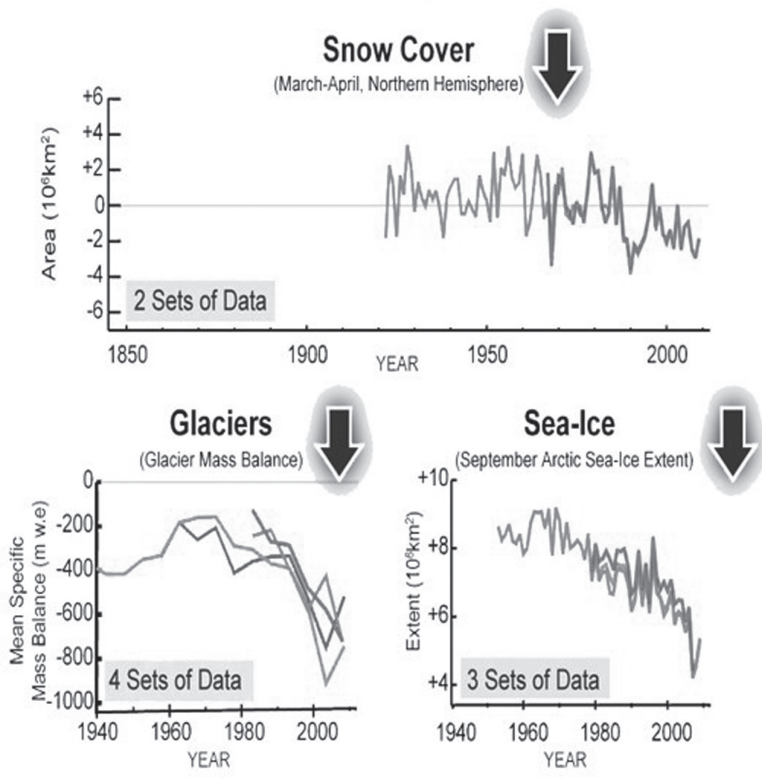
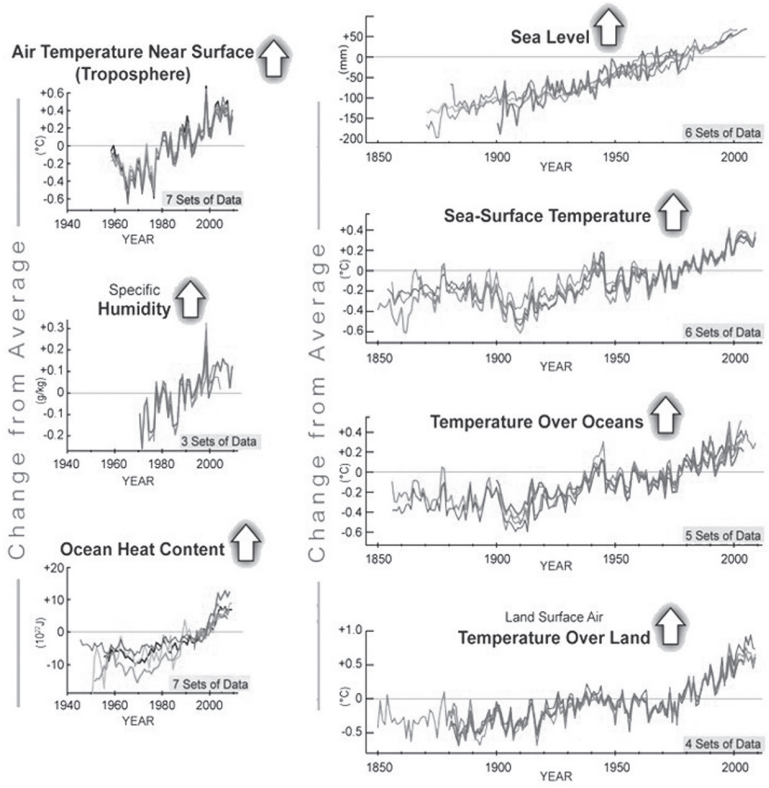


Figure 1

a hundred years. Is it possible that what we're seeing now was the result of changes that began a hundred years ago? What happened then? If you look at the curves in Fig. 1, all 10 indicators point in the same direction. You'll see that changes began in 1980. What happened in 1980? Nothing.

The question is different: if it takes a hundred years for the upper layers of the ocean to come into equilibrium with the atmosphere, what happened in 1880? The industrial revolution began to take off, and the use of coal escalated across the globe. Could it be that we're now seeing the consequences of what happened a hundred years ago? If that's true, and I leave that to your discretion, what we're doing now may not show up for another hundred years. But it could be irreversible. Those are the issues that we have to deal with.

Another indicator was published, again in BAMS: the global temperature change, Fig. 2. It is indeed a single number. But as you may have read yesterday, the UN has just announced that the decade of 2000 to 2009 was the warmest ever measured. I want you to take a look at this because what it tells you is that the average, decadal averages, have increased every decade since 1980, that same period that you saw in Fig. 1. Every year in the 1990s was warmer than the average of the 1980s. And every year of the 2000s was warmer than the average of the preceding decade. Again, this is a single number. Again, the magnitude is not huge, it's only one degree Fahrenheit. But it could be irreversible, and it could be pointing in the direction that ultimately can have substantial effect.

You see from Fig. 3 that there is a delay between what you currently measure as atmospheric temperature, and the so-called equilibrium temperature because of the slowness of the surface layers of the ocean to respond. Again, roughly a hundred years, as you can see from the difference between the transient and equilibrium temperatures. You also see a broad blue and broad red, and that's exactly what Professor Lindzen was talking about, namely the uncertainties. But nevertheless, it's almost a doubling of the equilibrium temperature as compared to the so-called transient, or immediate measure.

A three degree Celsius temperature rise, well out of the range of current temperature changes, but remember the transient to equilibrium, would cause phenomenal changes. There is already estimated to be a significant number of what we call climate refugees, people whose lives are at risk because of climate changes. It will get worse. 250,000 square miles of wetlands will disappear. The Seychelles, the Bangladesh lowlands would disappear, and they're highly populated. Again, what happened in 1980? The earth didn't change its axis, there were no sun spot activities that were particularly unusual. Could it be that we're seeing this equilibrium effect to which I referred to before? We give it a name. We call it the anthropocene, and the issue is: are the changes that we are making to our climate short-term, relatively minor, or an extreme deviation that will have phenomenal consequences for the future?

I would like to show you our CO₂ production. If you look at Fig. 4 from the U.S. Energy Information Administration of the Department of Energy, we are not reducing our CO₂ contributions to the atmosphere in the United States. Electric power, which is primarily due to coal in the United States, is actually going to increase. The black is the contribution of CO₂ from coal-fired power

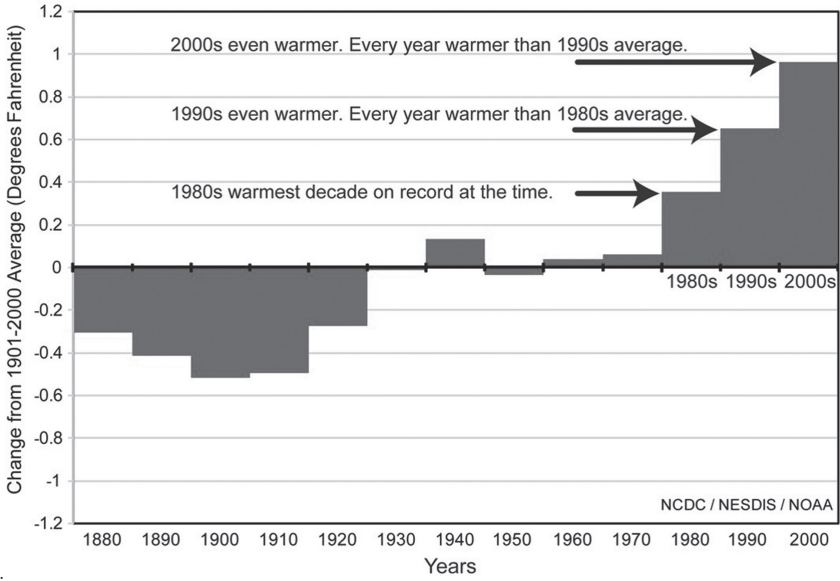


Figure 2

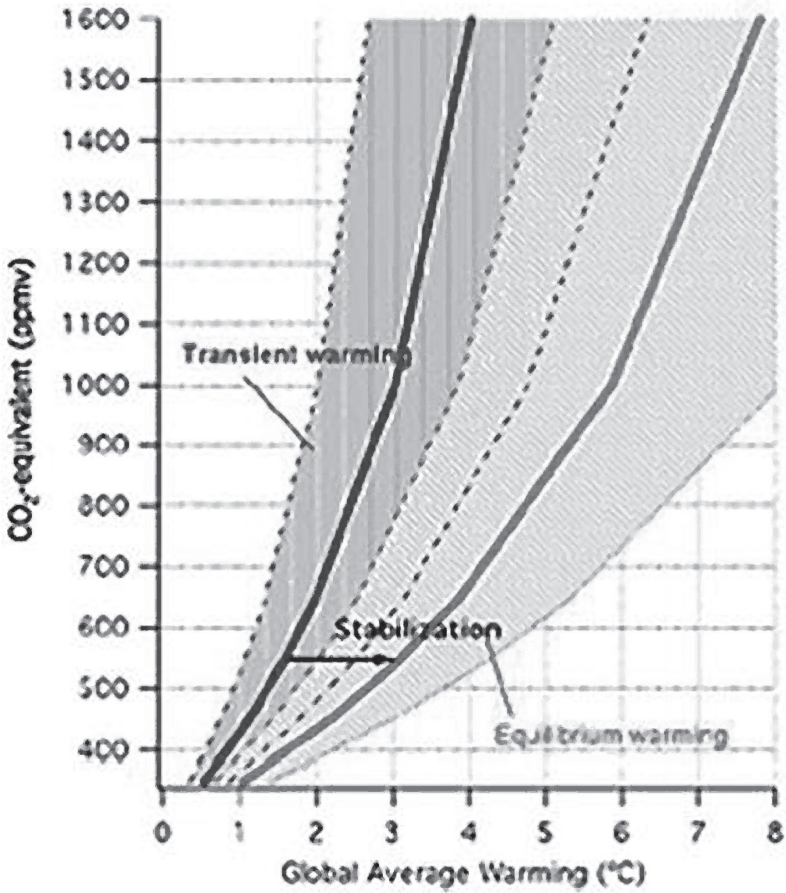


Figure 3

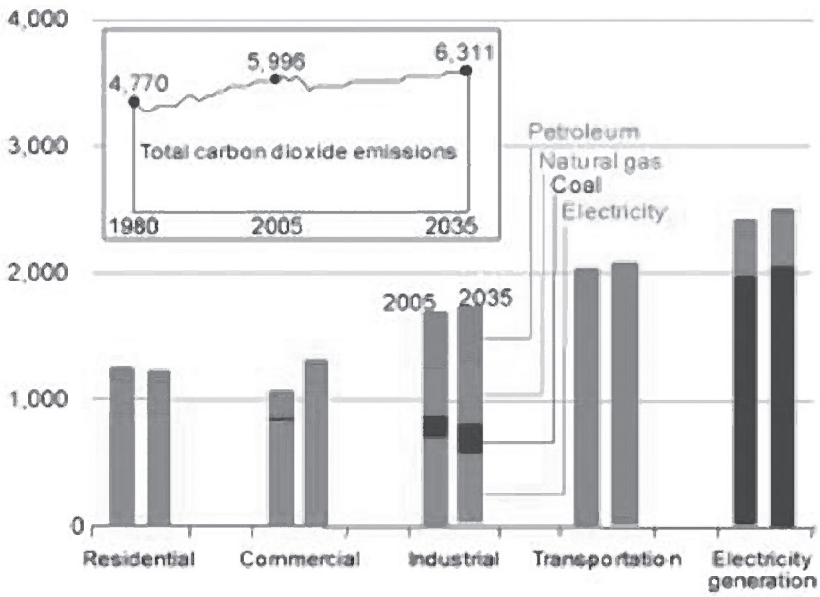


Figure 4

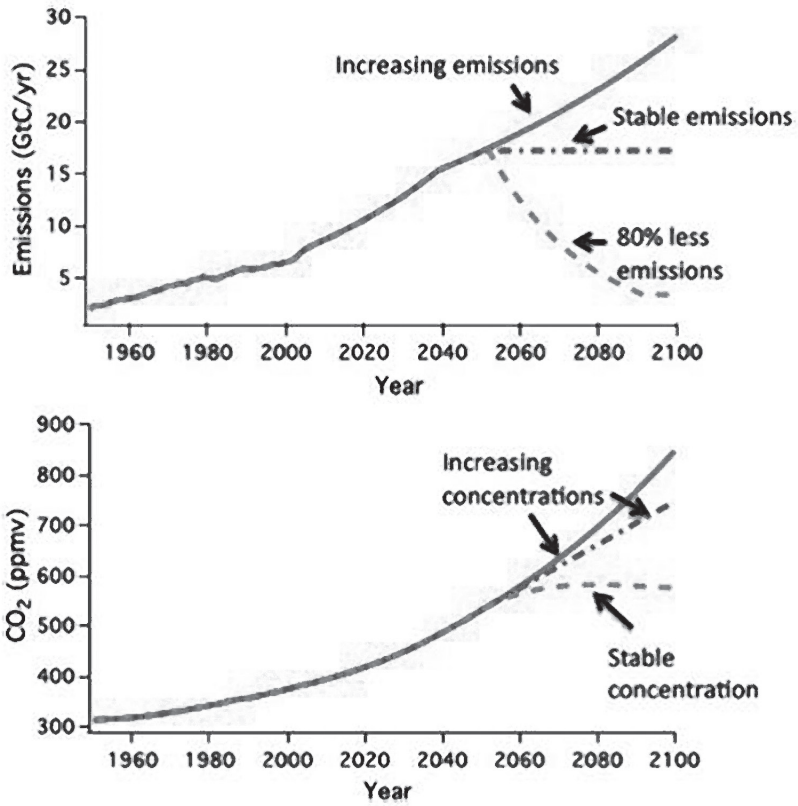


Figure 5

plants. You will see that, in fact, our emissions are increasing. And our emissions are small comparison with China, which is building a new coal-fired power plant each *week*.

So the issue of what we're putting into the atmosphere is non-trivial. You can argue that it's relatively small, but it's cumulative. It's the effect of CO₂ that can last for 200 years, and we're starting, perhaps, to see the consequences of it now. What's particularly difficult is to try to control the CO₂ concentration in the atmosphere. From our National Academy of Science's short report this summer, Fig. 5 shows that, if we just kept our emissions constant, the atmospheric CO₂ would continue to rise. In fact, to reach a constant value of CO₂ in the atmosphere, we would have to reduce the CO₂ that we emit by 80 percent by the year 2050. And look at what the CO₂ concentration would be: 550 parts per million in volume. That number leads to a two degree Celsius increase in temperature.

These are not arbitrary figures. They are telling us that something needs to be done. My thesis is that we don't need to do dumb things. I'm not particularly happy about carbon taxes or a cap and trade. It's my belief that we can approach CO₂ emissions in a market-friendly environment and approach. But it's time to start thinking about how to go about that because of what we're doing to our future.

An issue that Professor Lindzen raised was who's responsible for global warming, are there other culprits? There have been big climate changes in the past little ice age and the medieval warm period, so why can't these current changes just be explained by natural variability?

The medieval warm period was caused by an increase in solar radiation and a decrease in volcanic activity, both promoting warming. These kind of natural changes have not been detected in the past few past decades. We can account for those cooling and warming periods by what happened during those periods.

Another example was that warming preceded CO₂. Well, we can account for that by natural causes. What is occurring over the last hundred years has none of these natural causes at root.

In summation, I believe the data shows that the earth appears to be warming. We are certainly increasing the amount of CO₂ in the atmosphere, and I've given you the predictions and the measurements. There appears to be about a delay of a century between when we see the consequences of increasing temperature as measured to the actual equilibrium temperature. And what's even worse, if we ascribe that increase to CO₂, it's not enough to stabilize our emissions, we have to reduce them by 80 percent in order to stabilize the atmosphere concentrations. And finally, what we do now will have at least centuries of impact in the future.

Thank you.

Q&A

MR. GEORGE: Ladies and gentlemen, we are hopefully going to generate some questions from these speakers. We wanted to find out if any of you have a ques-

tion that you want to address to any of these speakers, and if so, I'll bring you the microphone and you can give it to us.

MALE VOICE: I'd like to ask a question about the Milankovitch cycle. This cycle's caused by the eccentricity of the earth and by the tilt of the axis, or the position. And there's been a much reproduced graph showing, from the Vostok ice core, showing 90,000 years of cold weather and then 10,000 of warm, about 10 degrees warmer, 90 and 10, that's gone on four times. Well, we've just finished 11,000 years of warming weather, so I wonder if either of you believe that we're getting ready to have 90,000 years of cold weather.

DR. LINDZEN: The answer is probably, but not immediately.

What is known and what is not known about the ice ages is curious. The 100,000-year cycle began about 700,000 years ago. We don't precisely know why it started then. We do know that the rate of change of ice volume and temperature does follow the Milankovitch forcing, which consists in the insulation of summer in the northern Arctic. And that varies hugely with the orbits. And it's true we're now in an interglacial and the configuration should reach a level where we begin to accumulate ice again in a couple of thousand years. And at that point there should be a period of approximately 10,000 years while the ice accumulates over North America and Europe, and we'll be back to an ice age. It's not going to be in our lifetime, it is not going to be in my kids' lifetime, but I don't know of any reason why it wouldn't occur. Even if CO₂, by the way, were an issue, we would have, by the 2,000 years, have depleted our supplies enough that it would no longer be affected.

FEMALE VOICE: It's a question for Dr. Orbach. Can you talk about what you see as the most promising methods to reduce-promising bets for reducing CO₂ and which are likely to be the most scalable?

DR. ORBACH: If I were to put some bets on the table, it would be for coal-fired power plants. That's what I would regard as the low-hanging fruit. A power plant of a gigawatt magnitude emits at least a couple of million tons of CO₂ per year. There are ways of capturing the CO₂ using amine liquids, today's technology, which take account of the heat and methane concentration of subterranean aquifers.

And by mixing the CO₂ at the surface, not by pumping it in as currently is done, one can avoid the problems associated with pumping gases into a subterranean aquifer. This process, our calculations show, would actually break even in terms of the total cost. Current CCS requires about 30 percent of the power plant's energy just to capture the CO₂ and sequester it. In my view, that is simply not economically feasible.

And so I think we need to be clever and think of different ways of approaching it, and there are ways of dealing with it. I have to tell you the current CCS methods, in my view, are a complete waste of money, and frankly will not work. Unfortunately, there has, just as Dick said, been somewhat of a panic to

rush forward and address these issues, with good sense. I mean people are concerned, but I think there are other ways we can do it that, in my view, would be economical.

MALE VOICE: The temptation, listening to this, as a non-scientist, is to make a Pascal's wager. Well, God exists or God doesn't exist. If I bet that God exists, and he exists, I'm better off.

I don't understand the noise to signal ratio here. I keep hearing a lot of noise and not very much signal. Can you narrow it down somehow so that there's a little more signal and a little less noise?

DR. ORBACH: Let me answer that, since I'm the one who's calling for some change. You have to call the signal. Dick is correct in his comments on the accuracy of the models. The models average over 160 kilometers, the grid that they've put across the earth. Dick is modest in talking about their inaccuracy. I have even greater problems associated with clouds and coast lines and so on. On the other hand, they all seem to point in the same direction. But neither of us can give you a higher signal than the latest, than what you see.

DR. LINDZEN: I'd like to mention one thing. Those graphs of temperature do leave off the error bar. You're talking about a change with one standard deviation being about .2 degrees centigrade, so please establish the noise. It's a significant trend. It's not zero. On the other hand, the error bars, as you know from statistics, often can be calculated in a way that itself is misleading.

I personally think you can get around some of the noise. Not in the data itself, but in the argumentation, by going to physics. And that's my feeling, that if you go back to basic physics, you can get some principles that you could use to evaluate the data, strange as that may seem to some people. For instance, Ray mentioned time delay, the fact that the oceans take time to catch up as long as the forcing is maintained. If you don't maintain the force, then there's nothing to catch up with. But what he didn't mention is the delay is itself a function of sensitivity. And so if you could test the delay by other means, you could at least see whether you have anything to worry about there. And that's been done.

Well, we can look at the response to volcanoes, you know, short-term impulses, and if you have a very sensitive climate, the climate stays depressed for years. If you have an insensitive climate, volcanoes just show up as blips. In the models we know that they persist for decades.

So we have all sorts of indications that the models are exaggerating the problem. If it is a finite issue, where we're thinking over the next 200 years of a one or two degree contribution to temperature, then one has to think in terms of cost benefit because there are probably as many benefits to that as costs. If you're talking about a large change, four or five degrees associated with catastrophes, you have a bigger cost.

An 80 percent reduction in emissions is rather remarkable. It takes us back to the emissions level of the mid-19th century. That's a pretty huge task.

DR. ORBACH: I personally don't believe we can do the 80 percent reduction, but I would like...

DR. LINDZEN: If we did it, it would be very consequential.

DR. ORBACH: But when you talk about constant benefits, be careful who you're talking about. We're very comfortable in the northern hemisphere. In fact, we can grow grapes in Sweden if we heat up, but the people in the equatorial belt may not feel the same way. And indeed, if you take a global view, you need to do that in your cost and benefit analysis.

MALE VOICE: Thanks. In addition to the cigarette analogy, I'll remind us that the lipid hypothesis about heart disease, which was generated after the Second World War, also was a big guess, if you will, based on the data. And at least half of the decrease in mortality from cardiovascular disease since the Second World War has occurred as a consequence of the fact that we took it seriously because doing something might have made a difference.

My question is for Ray, and it goes to Mary Ann's suggestion about experiment, namely, if one were to undertake a serious attempt to reduce CO₂ emissions and stabilize whatever rate it occurred, how long would it take and to what extent could we measure an impact in the slowing of the amount of warming; that is, can you do that kind of an experiment in our lifetime?

DR. ORBACH: And the question was, how long do you want to wait? My view is that the equilibrium issue for constant forcing, or increasing forcing, which is my hypothesis, if you go back to 1880, takes a hundred years. And so you won't know what the consequences are of our reduction in CO₂ for quite a while. On the other hand, you will see your forefathers' contribution to CO₂ having its consequence. And so if it makes you feel any better, you'll be able to track what they did to you and think about what you're doing to our offspring.

MR. GEORGE: I have one question from master of ceremonies privilege. One of the practical problems that people in Texas face is climate matters a lot, mainly in the terms of water. Now if I'm a public official trying to determine how to build infrastructure, and how my population is going to be provided water over let's say the Colorado River Basin of Texas, which is on the edge of a very dry and a relatively wet area, and I need to decide whether to spend several hundred, millions, or billions of dollars to build improvements or not build improvements, to do things to affect the quantity of water I can capture and use, how do I go about doing things like relying on the drought of record as a benchmark to do my planning?

We have made a lot of decisions in this state based upon assumptions about particular weather patterns that have happened since the Anglo folks from Europe began measuring what happened in Texas. How do we make those decisions in this world of uncertainty?

DR. ORBACH: Well, I think it's uni-directional. If you don't assume anything changes, we've got a water problem, and you better start investing. But there have been projections. This is different from global climate. You're talking about weather, and that's a much more difficult thing to predict on a local basis. What I understand of the southwest, coming from California where these issues have been looked at, the consequences of significant warming are very serious. And so the water issue will be with us whether or not there's global warming. It's a question of exacerbating the problem.

MR. GEORGE: The second question builds on that same topic. I'm a member of the Public Utilities Commission of Texas. If I have to make a decision to approve a coal-fired power plant in South Texas, or a natural gas-fired power plant in South Texas, what factors should I consider, if any, about the environment in weighing the choices?

DR. ORBACH: The natural gas combined cycle plant uses about half of the CO₂ as a pulverized coal-fired power plant. So there's no way to answer your question until I know what you are worried about.

The price of natural gas now is a quarter of the value of the BTUs that oil is. Currently, four dollars per million BTUs is stable for natural gas, and the reason that people have been nervous about moving towards natural gas is the volatility of gas prices. Not so long ago it was up around \$12.

I'm sorry, there is no vertical integration of natural gas and the electric utility issue. There is for coal. The contrast for coal lasts for 20 years, and so there's a predictability of cost. Right now, today, coal is still cheaper than natural gas combined cycle, but it emits twice the amount of CO₂.

DR. LINDZEN: Could I add something to that? In terms of any given location, or even the US as a whole, these decisions have to deal with whether you're concerned with climate change or you're concerned with the demonization of CO₂. Whether the US chooses to go with coal, or electric power, or natural gas, or oil as it had done 40, 50 years ago, it would have virtually no impact on climate, not matter what you believe about the noise. That is to say, into an algorithmic range, doubling CO₂ gives you the same impact no matter where you start from. And the contribution to CO₂ levels from any of these decisions is going to be minimal. So it's true that if you make it an abstract value of CO₂ emission, then, yes, you might make a choice one way or the other. But if your decision is based on climate, it's really not part of the equation.

MALE VOICE: What if we stopped today with all the gas-fired- generation, went to nuclear and went to hydrogen cells for propulsion, what would happen, besides somebody being happier on the evening news?

DR. LINDZEN: In terms of climate? The question is that if we did away with CO₂-producing power generation, they'd stay the same way.

DR. ORBACH: Yes. I agree with Dick. We are the only country, the only developing, major developing country and developed country, apart from a couple of notable exceptions, that have not built a nuclear power plant in 30 years, and there's very little likelihood we'll build more than two or three over the next decade. And that's a choice that you, the public, has made by virtue of your elected officials. I think it's a dumb policy, but that's the policy that we've got.

MALE VOICE: I am from Montgomery. My philosophical question has a little bit more to do with humankind's therapeutic interventions into this problem, and the concepts of geo-engineering. There are a lot of technologies emerging, physical and biological, where we could significantly alter the outcome, being able to seed the atmosphere, genetically modify crops, genetically modify animals, the ability to synthetically synthetic biology, being able to create organisms, all which could have different impact and application.

So my question, philosophically, is what are your expectations with regard to active therapeutic geo-engineering and who decides, because some of those technologies could be able to be implemented by even individuals, but they also could be implemented by individual countries, and yet have significant implications for the rest of the world. So would you comment on the emerging interventions and who decides?

DR. ORBACH: I can actually answer who decides, because I did. These issues of us pumping iron filings into the ocean, or changing the atmosphere by sending up reflecting materials and so on were under my purview. And I elected not to go forward. And the reason was that these are irreversible and I didn't know what would happen. And so in this case I elected not to support them. But not to quench the research that people were doing that would ultimately hopefully give us some answers. You're playing here with Mother Earth, and you can't turn it around if you make a mistake. And so in my view, prudence led me not to support them. That was for seven years in DOE.

MALE VOICE: I am not a scientist, and I won't try to wade into that argument. But a point has been made on history, namely the industrial revolution, and I am a historian. And being something of a contrarian in matters about history, it struck me to ask what is the evidence that 1880 really produced that big a jump for your hundred-year theory?

In other words, it seems to me that that is actually something that is testable by virtue of both historical sources and in other ways, and I'm sorry, I don't see, just on the surface on it, the spike that suggests that correlates with what happened in 1980. So that's my question.

DR. ORBACH: And the answer is, I didn't say a spike. What I was talking about was a slow increase, and the answer to your question is coal consumption that occurred in Europe during the 1880s and onward. I didn't show a spike. There is no spike. But it's a continuous factor that takes about a hundred

years to affect the equilibrium, or to reach equilibrium. So I think an interesting historical study might be coal production and usage as a function of time, and see if there's a correlation.

MR. GEORGE: With that, I'm going to call a halt to our first session of the afternoon. Thank you very much. Thank you to Dean Rankin and our panel.

STEWARDSHIP OF FAMILY SUCCESSION

Powell Family Ranching Business

JAMES L. POWELL

MR. GEORGE: And so our next session is the stewardship of family succession, an issue that is important to a lot of us about the legacy that we leave directly within our families. We're going to hear first from James Powell.

Mr. Powell is a rancher and a banker from the Fort McKavett area. He ranches in Schleicher, Sutton, Menard, and Tom Green Counties. From personal experience, making a living ranching in those counties has been a challenge for most of the period that he's been alive.

In addition to being a banker and rancher, he's a graduate of Rice University, a Navy veteran, and is involved in associations associated with wool, the National Growers Association, the Wool Growers Association, and cattle and banking industry, president of the Board of Regents at Texas State University System, active in higher education, active in conservation, active in political, religious, and civic affairs in Texas for many years. James Powell.

MR. POWELL: Thank you. It's a pleasure to be here and talk about my family. I've been asked to talk about something I know something about.

It has been of interest to our family to see if what we had to work with could be passed to the children of our family. And we worked very diligently on that, at least I have, for the last 60 years, 65 years. And in order to set a stage for this, I'd like to go back in history.

In order to settle this young nation's outback, to distribute the land, not only that land that the federal government or the state had through the Homestead Act, but Indian land, families and individuals were awarded land grants. They were asked to live on those land grants and develop them. Scott Powell, father of John Knox Polk Powell, was one such individual who took advantage of these land grants. His five sons fought in the Civil War and they took land grants for their service.

In 1872, John Knox Powell and his family migrated from Meigs County, Tennessee. They went to Everman, Texas, 10 miles south of Fort Worth, to farm and enroll their forthcoming children in Texas schools. In the year 1873, my paternal grandfather, Leonidus Polk Powell, was born. At the age of 20 he purchased land and began farming.

In 1895, at the age of 22, he married Essie Vaughn, and two years later his first child, Faye, arrived. She was followed in one year by my father, Virgil James. After plowing with a team of mules at the rate of two acres per day for several years, my grandfather decided to go into a more lucrative ranch business in 1902, even though more time from home would be required. He chose to homestead lands, believing it was the best immediate approach for this achievement.

The Republic of Texas, 1836 to 1845, awarded headrights of one league, which was 4,428 acres, for heads of family, and one labor, 177.1 acres, for a single man to farm. During the Republic the headrights were changed three times, culminating in 640 acres for the families and 320 acres for an individual. By 1845, approximately 81.4 million acres of land had been awarded. The various laws provided land for immigrants, colonies, homesteads, revolutionary military service, railroads, and education. In most cases, depending on the Act, water development and a residence of three years were required to receive a deed. When Texas joined the Union in 1845, these land rights were recognized. From this point forward, the Homestead Act of 1862, along with certain acts of Texas legislature, prevailed.

Bronco, Texas, was my grandfather's first stop to begin the use of the Homestead Act in Texas as well as adjoining land in neighboring New Mexico. Large acreages could be leased in New Mexico, allowing for a larger cattle operation and the employment of more men who could homestead land to add to the Texas homestead. The employees would accept family upkeep for five years (during the homestead period), then transfer that homestead right to the employer. After completing homestead requirements, in this case, five years, in residence and development of water, a deed was then transferred. The land could be worked as a ranch on their own or sold.

The homes on these properties were usually two-room dugouts, although some had three rooms. A residence in Roswell was necessary to school the two children, my father and my aunt. However, the family resided in this dugout in the summer months. Now it is difficult for me to envision my regal grandmother with her two children living at any time in a dugout. Travel between the dugout and home in Roswell was a very long day by buckboard. The advent of the Model T would shorten the trip, if a car could be purchased. On advice of a friend who owned a Model T, my grandfather sold his steers and traded them for sheep. He traded them for sheep because income was far greater with two products to sell—wool and lamb. Now \$500 was the cost of a vehicle, and, with this trade, that was in sight. A year later, the additional income provided for the purchase of the Model T. The horse and buckboard were sold.

The Homestead program continued until 1918 when the operation was on El Capitan Mountain near Roswell, New Mexico. In that year the coldest temperature on record was listed. During the cold spell, my grandfather fed carts to a bonfire to keep the sheep from freezing. Having added sheep to the business, it was decided to return to Texas and a warmer climate. My father was asked to leave New Mexico Military Institute to care for livestock while my grandfather looked for property in Texas.

Weeks later, in January 1919, on order, by wire, my grandfather asked my father to ship, by rail, all the livestock to Big Lake, Texas, traveling a distance of 25 miles to the newly acquired Crockett County ranch. The sheep's white wool had been scorched black as a result of their crowding the bonfire to prevent freezing. The novel sight attracted a large number of people to view the anomaly.

Among those arriving at the Big Lake rail yards was Dwain Hughes, president of the First National Bank of Mertz. His invitation to my grandfather to make the bank his place of service was accepted. Grandfather was happy to know a bank was willing to assist him. Incidentally, Dwain Hughes is a relative of a member of your organization, Vester Hughes.

Now in those days financial panics occurred unexpectedly. It was known that the institution that had financed this ranch and had the note was the nervous kind. So the note was subsequently, with the agreement of Vester Hughes' father, Vester, transferred to the First National Bank of Mertz.

It is today our family bank. It was the beginning of a longstanding relationship with Vester Hughes; his father, Vester; Dwain Hughes, his uncle; and the Powell family. Since that time my father and I have held positions in the bank. Today Steve Coates is chairman of the board; my nephew, Mort Mertz is president; and Vester, Howard Derrick, my cousin, and I are honorary directors. The governing directors are Chairman Steve Coates, President Mort Mertz, my nephew Len Mertz, Joel Suggs, Harvey Williams, and Trey Berry.

Before bands of sheep were brought to Big Lake; each band contained 1500 head of ewes. They were taken to the ranch and grazed on 22 sections, 14,080 acres of land. That accounted for the stocking rate that was taken, being 11.7 acres per animal unit, which is very important to remember.

The value of oil production in West Texas was little known, as were the mineral values. However, Humble Oil Company made an offer to purchase a large portion of the ranch minerals. It was accepted. Land was subsequently purchased in Menard, San Saba, and Schleicher Counties. Production was discovered in 1925. Because the minerals had been sold, very little royalty was owned; therefore, very little income accrued from the production.

Three years later my father traveled east from the county seat of Ozona to the neighboring community of Sonora where he met and married my mother, Johnnie Dell White. Her grandfather was James Taylor White, the third of four children whose descendants migrated from Louisiana to the Republic of Texas in 1836. You can understand why he felt lucky to cross beautiful country since he had come from the marshlands of Louisiana.

And as members of Stephen F. Austin's colony of Three Hundred, their destination was San Felipe de Austin in the Republic of Texas. Families of the colony were granted a legion of land, 4,428 acres for livestock and a labor of land of 177.1 acres for farming. In future years, the land was divided among the children, or sold.

My maternal grandfather, James T. White II, settled on purchased land in Cherokee County and San Saba in San Saba County in 1860. Mother's father, John Henry White, was born at Cherokee in 1862, and third of seven children.

He married Ellen Coffman in 1895. They reared seven children. Born in 1907 was my mother; she was fifth.

The main source of income was a dry land farm and some livestock. An economic unit for a livestock operation needed to encompass at least 5,000 acres, and more now, probably quite a bit more now. To be productive, large costs, long hours of labor, and abiding dedication were needed to place water, fences, corrals, dipping vats, homes, and other improvements on unimproved land. Stocking rates similar to that mentioned in Crockett County, 11.7 acres per animal unit, were contingent on these properties. In those days management considered droughts to be short and rains to be dependable. The constant appearance of droughts resulted in a gradual deterioration of quality forage and an infestation of non-productive brush. This condition continued and a long-term drought beginning in 1950 and lasting seven years severely reduced available forage for grazing. Stocking rates had to increase to 25 acres per animal unit. This resulted in a reduced return on investment and much larger operation costs to control the brush.

Today the US government has provided the individual an opportunity to control and develop a business in agriculture, or any other sector of the economy, as far as his education, initiative, and ability will take him. This proud quality of citizenship should be preserved. Our forefathers have solved crucial problems: water development, fence and corral installation, predator control, installation of electric, telephone and road service, and building a community of churches, hospitals, and schools.

It is our responsibility to preserve today's environment and resolve current problems so that we can improve production of the future for the custodians of our property. One small example is the need to provide water for the public as well as the ranch operation. An example of which I have knowledge is the Pecan Creek Watershed.

The Texas legislature in 2000 passed a bill to assist in financing the removal of brush from about two million acres of the North and South Concho Rivers' Watershed. This project would provide more water for the communities that enjoy the rivers' flow nearby. It is of great interest that the benefits are often difficult to realize. For instance, with proper management the removal of all brush on the 400,000-acre Pecan Creek Watershed, which is a tributary of the South Concho River, would allow grass to cover that area. Before removal of the brush, known to be mesquite and juniper cedar in a 65 percent canopy, only four inches of an annual rainfall of 18 inches would flow downstream. That is approximately 1,545 acres of water, 60 feet in depth that would be released. The brush requires 2,800 pounds of water to grow one pound of brush. Grass requires only 700 pounds of water to grow 1 pound of grass. So with grass replacing the brush, the discharge of rain would be 12 inches of an 18-inch annual rainfall, and it would amount to 4,748 acres and be 60 feet deep. That would then go downstream in the rivers supplying the neighboring communities. That's approximately three times more water to be released in each annual rainfall to support the grass growth that will cover all the terrain and supply feed for the wildlife and the livestock. That is 132 million gallons of runoff in each average

annual rainfall. San Angelo will pump slightly more than 5.2 billion gallons of water annually for its community. In an average year, rain on the Pecan Creek Watershed would supply enough water for 22 years of municipal consumption.

This is a graph that will show you how I calculated the runoff and the amount of water that would go downstream. If brush remains on the watershed, only 30 billion gallons of water is available, and the water supply would be only five years. Other than evaporation and transportation, most of the water flows downstream for agricultural usage and the usage of our neighbor communities.

Along the way, experimental and mechanical devices were developed to try to eradicate the brush. One was a foam machine, and that was effective, but it proved too slow and costly, not successful for brush, but successful for vegetables. And another example was the elimination of a very costly pest, the screw-worm fly. That was a tremendous feat, and it was very successful. The flies were shot with a large instrument with radiation and it sterilized the male. They bred the females and as a result the eggs that were hatched were sterile; they did not hatch, and that has eliminated the screwworm fly. With initial high capital investment by the livestock men, the US Department of Agriculture continued the program so that now the pest is completely eliminated from the North American continent. My estimate is that annually there has been a restoration of 8 percent of the livestock men's capital. That was originally an annual cost of the livestock and wildlife lost to the pest added to the large cost of labor to doctor and save livestock afflicted by the screwworm. In those days horse work was 12 hours a day, seven days a week, from the last frost in April to the first frost in October, when that frost sent the fly into hibernation.

Another benefit to the American consumer who wishes to purchase reasonably priced cotton clothing and the farmer who wishes a more efficient farming operation is the bollworm control program. Today there are large savings resulting from this program.

Given the freedom and minimum government regulation, citizens of this country will accept responsibilities, actively preserve our heritage, and resolve problems that plague our economy and democratic system. I have been a part of some of those efforts. A matter of great importance in the future for us is the preservation of our heritage. Our countrymen's and youths' understanding of our country's history and of the principles of which our country was built are vital. The everlasting need of knowledge by voters is necessary. The founders of our country knew education, honesty, integrity, and vigilance to international and internal dangers were necessary to maintain this democratic republic.

It was Ben Franklin who responded to a lady as he exited the Constitutional Convention in Philadelphia when she asked, "What kinds of government have we?" He responded, "A republic, if you can keep it." Those who read the inaugural addresses of Washington, Jefferson, John Adams, and other early presidents will find those admonitions stated.

Today a large question arises that needs resolving immediately. Land grants, land purchases, and estates are now and in the future will be broken up as current owners die and pass their expertise and land to their children and heirs. In the instance of my childhood family, my parents had a son and twin daughters.

There are three children. I married Nancy Hunt of Sonora, Madolyn married Mort Mertz of San Angelo and Marolyn married Joe Bean of Ozona. As a result there are 9 grandchildren, 18 great-grandchildren, and 7 great-great-grandchildren. When the landholdings are broken 38 ways, the units are too small to be economically viable. Some in government wish to levy a heavy death tax on these estates.

Now on September 1, 2010, Robert Rubin, co-chairman of the Council on Foreign Relations, and former secretary of the US Treasury, suggested the top tax rate be placed at 45 percent. Through the years the business has paid an annual income tax. Then at death, an additional burden, the death tax is imposed upon the estate. Rubin suggests an exemption of \$7 million per family be provided, which would exempt 4,500 acres of agriculturally productive land. That is not an economic unit. As the productive units are forced by taxes from the hands of those families and individuals with productive expertise, a very large risk is in play that may limit production of future food and clothing supplies for the United States population, when that certain foe acquires the power to threaten our freedoms and safety. It is my hope that councils that propose policy for this country, such as the Council on Foreign Relations, will pause and reflect on this important issue and travel in a more reasonable course.

These, ladies and gentlemen, are the principles and the heritage for which we are responsible and should with the greatest effort conserve. Thank you.

THE KEMPNER FAMILY IN GALVESTON AND IN SUGARLAND

HARRIS L. KEMPNER JR.

MR GEORGE: Next we'll hear about family succession from Shrub Kempner. Harris L. Kempner, Jr., I believe is his actual birth name. Shrub Kempner is so well known to this room; it is hard for me to even try to introduce him. He is a well-educated Harvard graduate, Stanford Business School, portfolio manager of Kempner Capital Management in Galveston. He is a dynamic Texan, active in his religion and the Board of Directors of American Jewish Committee.

He is one of those people for whom the community of Galveston, Texas, owes its existence. Galveston has had troubled times in recent years and Mr. Kempner is one of those people who we claim as a prized member of the society and who has done a whole lot for Texas and particularly for Galveston.

MR. KEMPNER: The fact is, I'm named after a street in Galveston. I've been asked to talk to you about the Kempner family and Galveston with an accent on stewardship and continuity. This has morphed into a discussion of transmission of family values by their activities. It occurred to me while I was working on it, that whereas there are some elements of stewardship in what we've done in Galveston over the years, we are of course one of many groups of people involved there. A more clear-cut example of the Kempner family stewardship is Sugar Land because, as some of you may know, it was a company town for a good part of the 20th century. So I'll try to cover both.

Let's talk first about Galveston. My great-grandfather, Harris Kempner, the original, got there in approximately 1870 having been an immigrant to New York City at the age of 14. A peddler, he worked his way somehow from New York to Cold Springs, Texas, where he established a dry goods store. He fought in the Civil War for the South, was wounded, left for dead, and recovered. He came to Galveston afterwards for the opportunities there. He was a very successful businessman, but died early and very unexpectedly in 1896, at age 56.

My grandfather, I.H. Kempner, Ike, whom some of you may have known, was 21 years old at the time, a senior in college. He had to come back before graduation. He essentially stepped up, maintained and built the businesses, some of which still exist, with the later help of his three brothers and his indomi-

table mother, my great-grandmother, whom I still remember very vividly indeed. The family has played a part in Galveston's future since 1870, therefore.

Now, in Galveston, in turns of stewardship, our activities are characterized by philanthropy and political involvement, as well as economics. You have to expand, at least when you're talking about my family, to the Kempner-Levy family. My mother's father and uncle were lawyers in Galveston and part of this story.

We've been heavily involved in changing the Galveston form of government twice. The first was with a commission form of government, which my grandfather helped spearhead, utilized for the first time just before the 1900 storm. My grandfather was the first Commissioner of Finance of a ruined city.

Secondly, my mother, a Levy, along with other League of Women Voters members, helped change that commission form to the present day council manager form of government in 1961. The conversations around the dinner table between her and my grandfather must have been quite interesting. At that point. I was away at school, but I can just imagine.

She ran and was elected Councilwoman, the first female elected to Galveston city government. I count three mayors of Galveston among my Kempner-Levy family, including most recently my cousin Lyda Ann Thomas, who eerily was the mayor of Galveston during and after the devastation of Hurricane Ike in 2008. She's just been term-limited. When those names came up that March, we both called each other more or less simultaneously and said, "It wouldn't be conceivable that we'd be hit by the Ike one, would it?" Well, yes. It was like some kind of weird pattern was in effect.

The other non-business role in terms of stewardship that we've played in Galveston has been a philanthropic one. Individual family members have always been involved, but particularly of note is that we allowed some of the benefits of the business to go to the Harris & Eliza Kempner Fund. It was formed in 1947 and has been involved in every major social, economic, arts, and preservation aspect of Galveston since. This will continue on in perpetuity as one of the main tools for the Kempner family in continuity that we have, and that I commend to all of you to think about. But, there were many others to cooperate with, and there were many others to contend with over the last 140 years in Galveston.

Sugar Land, beginning in 1906, was a somewhat different story. In 1906, the most unlikely pairing of partners I know of came together to buy and set up a facility for managing some 18,000 acres of land in the Imperial Sugar refinery in Sugar Land, a community then aptly named the Hell Hole of the Brazos. It was an area where most of the labor was done by convicts. One person thought it of note to point out that, "About a mile from Sugar Land there was a dump called Mexico. Liquor was sold openly, dance and gambling places and prostitution operated full blast. It was a cesspool. All nationalities, scum, drifters, and professional gamblers." It sounds like some descriptions I've actually heard of Galveston. Many men carried pistols, mostly in their pants pockets, a probable reason for the popularity of suspenders at that time.

A successful citizen of this region was a man named W.T. Eldridge. Mr. Eldridge was the gentleman with whom, in 1906, my grandfather, I.H. Kempner,

chose to do a 50-50 partnership in buying both the land and the sugar company, and taking responsibility for the citizens who lived there as well. The difference between these two men is pretty clear cut. My grandfather was a distinguished intellectual, family-oriented, and a very gentle man. Mr. Eldridge, on the other hand, was tried twice for murder. The second episode took place before witnesses in a crowded moving railroad car where he gunned it out with an enemy in a quick draw situation. He also succeeded in wounding a bystander in the car. He was a very rough guy.

However, he was a successful businessman, a landowner in that area, and a banker. My grandfather chose to partner with him, a choice that still baffles all of us. This began a 25-year period where the two served as astonishingly amiable partners. My grandfather and the rest of the family chiefly handled the finances in the sugar company, Mr. Eldridge was primarily in charge of the acreage and agricultural interests. They created a company town.

Some aspects of this may appeal to you as good business, but there was certainly an aspect of good stewardship. They cleaned up the Mexico brothels right away. My grandfather refused to use convict labor, and they brought in tenants and other workers. They basically populated the company town largely with German and Czech folk from the Schulenburg area, because that's where some of their initial employees came from. I remember Czech music being played on a Sugar Land radio station in my youth.

They were a segregated community, but they built the first new houses that anyone had seen in a generation or more for all the races. They built stores and utilities, and they spent a substantial amount of money on a levee system to keep the Brazos from flooding as badly as it had, and put in shell roads which were considered high tech at the time.

In 1918, about the end of the war, they went to California to see a model school, and a copy of it was built with 11 buildings in Sugar Land. They built the non-profit Laura Eldridge Hospital in 1921, and they created the bank in the late '20s. The sugar company prospered generally and the land was profitable, and the citizens certainly had a better life in the late '20s than they did in '06.

There was an interesting sense of obligation to others that occurred during the Depression when suddenly there was very limited money available for this kind of investment. Mr. Eldridge died in 1931, but his heirs kept their ownership until we bought them out just after World War II. During the '30s we kept the company open with RFC loans and others. Those who say the government doesn't have a role in the private sector must remember the RFC occasionally.

The company maintained salaries for employees when it could have easily gone under. That was the most important single act of stewardship we did. We had to refinance at least twice. Like everyone else, we were sucking wind. But in 1931 we built a second school, which indeed is a brave statement about how we felt about the community. The hospital of course had to be heavily subsidized. We also went into the economic development business, attracting new independent businesses to the area.

In 1938, when the laborers of the sugar company desired a union, my uncle, Herbert Kempner, then in operating charge, said, "If they want one, I see no rea-

son to place obstructions in their path.” From 1938 onward, the sugar company was, in fact, unionized and we were never struck.

In 1958 we moved gradually to end the company town format. Among other reasons, Houston could have shortly swallowed us, which we did not want to happen. Workers were sold the homes in which they lived; the city of Sugar Land was granted its charter in 1959. It was a town of about 3,000 people at the time.

And finally, the last step my family took before selling all the land was to recognize that Highway 59’s incursion into Sugar Land made it far more developable. We wanted to ensure we had a quality developer, both for the citizens themselves and for ourselves because a new quality development would set a tone for the rest.

I remember going around with my father to real estate developments around Houston. After looking at their Webster NASA development, it was quite easy to determine that at least there was a high probability that Jay Kamin and Stewart Morris would develop the Sugar Land area as well, and well. Our faith in them was justified as they created what is now Sugar Creek. Finally, in the late 1970s we sold the rest of the land to Jerry Hinds. Now one sees explosive growth at Sugar Land. It’s a city of approximately 85,000 people, which at the moment is almost two times the size of Galveston.

Now throughout all this we made our set of mistakes, but the primary concept has always been that we had dual responsibilities, to Sugar Land and Galveston, to enhance the towns and make a reasonable return on our investment there. We saw no conflict between the two. On the contrary, we believe they were complementary long-term goals. That still is the hallmark of all of our activities.

And since this is the Philosophical Society of Texas, I think I’ll throw you a philosophical bone. Because I think that philosophically this kind of motivation, is that of traditional Jewish concept; in Hebrew *tikkun olam* means making the world a better place.

In Judaism there’s a very cloudy picture of whether there is actually a heaven or hell. But there’s no doubt whatsoever that one of the highest obligations as a Jew is to make the world a better place, particularly since this may be the only world you ever inhabit.

Whatever other motives were operating among the Kempner family in our communities during this period of over 140 years, making the world a better place by our lives has been a concept we’ve held to proudly. Thank you.

STEWARDSHIP OF RESOURCES PART TWO

Stewardship Through the Eyes of a Bird Dog

DALE ROLLINS

MR. GEORGE: Dale Rollins is a unique guy. He wants to challenge Mr. Bamberger's foreman on bird calls and he's probably pretty good at that. Dale is a native of Hollis, Oklahoma, a graduate of Southwestern Oklahoma State University, Oklahoma State, with a Ph.D. from Texas Tech.

He is a wildlife scientist, works as a professor at the extension in Wildlife Service here in San Angelo, and has for a long time—I don't know how long I've been reading him, but a good while—written about preserving wildlife and quail in particular in the *Livestock Weekly* and other publications.

He is probably the most knowledgeable person in this part of the world in dealing with the wildlife of this part of Texas, quail in particular. I welcome Dale Rollins.

DR. ROLLINS: I appreciate your indulgence and our patience. You have been through a long day; I've shared it with you. I've enjoyed the presentations. I was flattered when Mark McLaughlin asked me to speak to the Philosophical Society of Texas. I actually called him a couple of weeks ago, I said, "Is that literal?"

He assured me it was, and after being at your presentation today, well, I wholeheartedly concur.

Welcome to San Angelo. We're proud to have you here. And since Mr. Bamberger did throw down a gauntlet saying that his foreman was just the next best thing to a bird, I take that as a bit of a challenge and I told David I was going to do this. He left at lunch. I did win the National Quail Calling contest back in 2001, and so when I'm at a meeting, people will start reading off my credentials and ranchers don't give a rat's patoot about that. But when you can say, "Have you ever been charged by quail, have you ever been attacked by quail," and you get them to do that, it looks impressive to them. So I'll give your state bird of Texas, which you know as what?

Mockingbird.

Does anybody know the right name of the mockingbird?

I thought this was a philosophical group. *Mimus polyglottos*. Mimic many voices. So here's a mockingbird. So here you're mixing offers.

And imitation is indeed the most sincere form of flattery.

And while the computer's coming up, I don't know if there are any hunters

in this group. I question whether there are because you hold your meeting right here during the height of the rut. And right in the middle of quail season, but there must be hunters coming up in the ranks because I notice you're going to have your meeting changed next year after quail and deer season.

There are some hunters in the administration looming. Certainly hunting is a big component of West Texas. If you fly into the airport out here during the month of April, probably three-quarters of the passengers are wearing camouflage; they're coming to West Texas to hunt turkey. And if you're hunting turkey, you want to sound like a lovesick hen. Before I imitate this, I always have to ask, are there any lovesick hens?

All you want to do is just make a little seductive yelp like this. Okay.

People ask, "Where did you learn all that?" I tell them I got my B.S. in a lot of places. Again, welcome to San Angelo. I've been here 24 years. They told me when I moved to San Angelo, if you wear out a pair of boots in San Angelo, you'll never live anywhere else. I'm on my third pair of boots and I'm still here. So it is really is a wonderful place and we're glad to have you here. And that's about where you're at.

Now, where are you relative to all the lights? You're in a black hole. Well, I think that's good because when I talk about quail and tell people where quail used to be but where they're not anymore, I tell them quail are like cockroaches—they like dark spots.

Aldo Leopold, who I'm going to talk quite a bit about in my presentation, said, "To those devoid of imagination, a blank spot on the map is a useless waste; to others, the most valuable part."

If you live in West Texas, we take that as a great blessing. So my task is to talk about stewardship, and I titled it *Stewardship Through the Eyes of a Bird Dog*. After hearing our last two speakers, I'm a bit embarrassed. I can probably tell you more about the pedigrees of my dog than the pedigrees of my family.

This gentleman, Aldo Leopold, who we recognize in wildlife and conservation—as the father of wildlife conservation, wrote a book in 1948 called *Sand County Almanac* and I will kind of quote from it somewhat. But in the preface of that, he said, "There are some who can live without wild things, and some who cannot not. These essays are the delights and dilemmas of one who cannot." So for the next 20, 30 minutes I'm just going to substitute essays with ramblings, and I adopt that as basically my *modus operandi*.

I am a student of quail. I came by it naturally; I came by it honestly when I was five years old, south of Hollis, Oklahoma, out in the country. During the summer I heard this bird, and my mother was in the kitchen. She said, That bird calls its name, Bob White. And I tell people after 48 years, it's still calling me today. So much of my profession, my avocation, and my vocation, has been steered as a student of quail.

And I suspect I could speak for our climatologists and others who have spoken today that when you're introduced as an expert on X, Y or Z, in my case, quail, I can promise you I'm saying one thing as I move towards the lectern: There's a whole lot I don't understand about quail. Education is a life-long process, something we can all agree with there.

I've got to tell you real quickly what my day job is. I work for Texas Agrilife Extension Service. That's the outreach arm of Texas A&M University to all of the county agents and landowners across the western half of Texas to help them become better stewards of their wildlife resources, per se, their natural resources, the folks who primarily own wildlife.

And I try to make that to where it complements to a degree that it can, of these cattle operations or sheep and wool operations, but with the realization that you can never maximize both at the same time. There's always going to be trade-offs. You've got to be able to appreciate those.

As an advertisement, I started a camp 18 years ago called the Bobwhite Brigade, training young leaders and using quail as the model to teach natural resource and conservation leadership skills to high school youth. And we now have a total of six camps in Texas, and if you have any youngsters ages 14 to 17, I hope you'll remember at some point in time you can go to texasbrigades.org and find out all about that.

But just as Mr. Bamberger was talking about his conservation education efforts, and I certainly applaud those, we just take a little bit different tack. We put 25 kids at each one of these camps. They're a boot camp on wildlife management using quail or deer or bass as a resource. Basically, we bring them to grips with the fact that if you want to get ahead in life, you've got to work while others sleep. It's a 100-hour boot camp and we keep those kids up and working about 86 hours of that boot camp. So we really put them through their paces.

Proverbs 22:6 says, Train up a child in the way he should go and when he is old he will not depart from it. So I think we can all appreciate the importance of roots, generation roots, just as Mr. Powell and so forth. Today's kids, as you can appreciate, have suffered from what we call nature deficit disorder.

We also use the old saying that, Anyone can count the seeds in an apple, but no one can count the apples in the seed. And we can take kids from some of the most urban areas of Texas. We're not trying to train wildlife biologists; we're trying to train future leaders. We want the next generation of Senator Cornyns to have a good background in wildlife and conservation.

My other day job is that I serve as director of the Rolling Plains Quail Research Ranch located about a 100 miles north of here. I won't bore you with all the details. If you're a quail hunter or interested in quail, I encourage you to come see us and you can check us out there on quailresearch.org.

Now, going back to my Okie roots, I failed to ask, how many of you all have a degree from the University of Texas? I bet a fair number of you. Oh, yeah. Well, you know another DR from Hollis, Oklahoma, Darrell Royal. I peddle myself as the second DR from Hollis, Oklahoma.

But I'm also very proud there's a lot of people from my home state, and no prouder of anyone than Will Rogers. To me, Will Rogers was as an insightful an individual as there ever was. If you read his quotations, they could be on tomorrow's headlines and be just as timely, as appropriate. So I'm a real fan of Will Rogers. I'm a real fan of quotations, as you're going to see as we go through the presentation.

America's good fortune can't possibly last longer than her natural resources. Okay. Memory time. There was a television commercial, and the narrator said, "Some people have a deep abiding respect for the natural beauty that was once this country, and some people don't." Who was featured on that commercial?

MALE VOICE: Iron Eyes Cody.

We have a winner. Iron Eyes Cody in the Keep America Beautiful campaign started about 1971. How many of you can remember that commercial? Do you think it had an impact? I think it had an impact. So when we talk about some of these monumental societal problems that we face, never forget that things can work. And I think that one had an impact, a positive impact.

Leopold said that the oldest task in human history is to live on a piece of land without spoiling it. Are there any spoiled properties across Texas? Like Mr. Bamberger said, he wasn't looking for good property, he was wanting the most defiled property there was, and the realtor said, "Well, there's plenty of that."

Have you ever noticed, when you fly, the erosion scars that you see on the landscape? It's a depressing sight, but look at the erosion that's occurred in the landscape out there. Soil is one of our greatest natural resources, and, you know, Mr. Bamberger did a great example in talking on stewardship, plant diversity, and animal diversity. When I deal with landowners, primarily, some of them are what I call born to the land; others are reborn to the land, they're second or third generation. They've moved off to Dallas, Houston, wherever. Now they've come back and purchased property or resumed the family operations.

And there's a third group that I just call ag business. And the motivations for why they own land are different, the way they think about land and stewardship and succession of that inter-generationally. I think all those change depending on the situation.

I like this quote: "In the end we will conserve only what we love; we will love only what we understand; we will understand only what we are taught." I love that as a benchmark or as a backdrop when I'm having a workshop, whether that be 13-year-old kids or 73-year-old ranchers. And every one of them has something to bring to the table.

Jay Weaver was a prairie ecologist who studied the tall grass prairie up in Illinois for many, many years back in the '30s and '40s. He wrote that rangelands are an open book for those willing to read. Upon each grass-covered hillside is revealed the history of the past, the conditions of the present, and the hope for the future.

And when our various speakers talk about mesquite or they talk about Indian grass, all those plants tell a story. It may not be a good story, but it tells a story of the past. And throughout our management, good or bad, we have propagated certain species to the expense of others and those all have implications on down the road.

So if we seek to improve stewardship, to teach a conservation ethic, as Leopold would call it, I see three hurdles to that. The first one's ignorance. I'm not

being judgmental when I say that, it's just lack of knowledge. Second is apathy. Who cares? And the third one is greed. I suggest that those are three motives, there may be more, but I identified those three motives as why some of the country of Texas looks like it does.

Leopold said that the urge to comprehend must precede the urge to reform. Everybody wants to get out there and do a quick fix; they want to address the symptoms, but we don't always want to think about the cause. And if you don't address the root cause, you'll have the symptoms back pretty quickly. And Malcolm Forbes said that the role of education is to replace an empty mind with an open one. Will Rogers once said that everybody's ignorant, just on different subjects.

That might be an underlying theme right here in this room. We're all well-educated, but we're all ignorant, just in different subjects.

Some of you were alive back during the early part of the '30s and the Dust Bowl days, probably the worst ecological catastrophe that North America has seen, at least in an acute sense. Why did it happen? Ignorance. Ignorance of soil erosion, ignorance of farming in dry areas, and practices which were just not compatible with the environmental regime of the time. We've learned a lot from that: shelterbelts, just a lot of better farming practices.

This is what I call a quail-proof fence. Now Mr. Bamberger talked a little bit about deer-proof fences. You've all seen those, the eight-foot fence. Well, this is just standard fence, but one side is quail proof. Do you know which side is quail proof? The area on your left. There's no grass out there, so there's no quail. Well, so was that a factor of ignorance, was it a factor of greed, or was it a factor of apathy? I don't know. Can anybody cite me from Luke, Chapter 10 verse 33? "Forgive these men, Father, for they do not know what they are doing." So, again, we've got several motivations there that could have resulted in poor management, or it could have been a number of factors. But for whatever reason, we have that type of management.

For my love of bobwhite, if you're wondering why: I was raised in southwestern Oklahoma and—where you folks were probably endeared by white-tailed deer—there were no deer where I was at growing up. So if you went hunting, it was implied you were going for quail. And I'm a product of that, and so I built much of my professional life around quail and their dilemmas.

Lincoln asked why is it that we never consider rationing till we see the bottom of the barrel? How many of you see as many quail now as you did 20 years ago? One person. I need to get your name and address. I've got some bird dogs we need to talk to you about.

Most people have had a dramatic decline in bobwhites. Now think about it. Bobwhite. How many of you have heard the bobwhite's whistles. It's one of the most iconic songs that there is, and yet they're going downhill like this over the last 40 years. They are the poster child for Audubon's common birds in decline that they released about three years ago.

If you look at that top row of charts going from left to right, the message there is, the darker the red, the more bobwhites. And that first graph is in 1978,

the second one is '87, and the third one is '97. If you look at the bottom two graphs, the red indicates if you have greater bobwhite numbers; green represents the greatest declines.

So if you want to go quail hunting in an area anywhere east of San Angelo, you're not going to be very happy. And to me that's recognized as one of the greatest conservation challenges that's ever faced North America. Again this is the decline of a very common, formerly common quail.

So as I work with landowners, I say, Are you a wide-eyed miner or a manager? Now think about it. Think about the dichotomy there. Are you a miner or a manager? A miner extracts. We mine coal; we don't manage coal. But if you're dealing with a renewable natural resource, like a wild turkey, a white-tailed deer, a golden-cheeked warbler, those are renewable, and we should be moving towards that idea of the management, not just mining.

So as I hold workshops, classes, again, for teenagers or adults, what we call Quail Appreciation Days. I held about 60 of them across the state in the last 15 years. I encourage the individuals to morph into a bobwhite. If you morph into the dimensions of a bobwhite, you stand six inches tall and you weigh six ounces.

Morph for me. Now, answer this question. How many bobcats do you whop? How many Cooper's hawks have you nailed? Because he nails you after that. So we've got to think about how our management affects this little critter called a bobwhite. And as some of you know, the value of a quail probably exceeds the value of a calf on your rangelands. They're that economically desirable.

And as we think about ranching, there are two things that really can impact quail habitat, positively or negatively, depending on how it's applied, and that's grazing management and brush management. They can be a very powerful positive force or a very powerful negative force, depending on how they're applied. So certainly we want to learn the nuances of each.

And sometimes you've got to talk about some of these plants that you've hated forever, and urge thinking about them through a different set of eyes. What is a weed but a plant whose virtues have yet to be discovered?

This is buffalo burr, yellow sticker weed, Menard County alfalfa. This gentleman over in Coleman County said, What can I spray that with? I said, Well, first of all, what is it? He didn't know and I said, Well, man, that's not too bad. I said, Quail like to eat the little old lava and charcoal rock seeds inside there. We hadn't gone another 30 yards before we flushed about 15 birds out of there. And to this day he doesn't mind the buffalo burr.

So let me introduce you to my three philosophers that I want to cite and chat with you just a little about. The first one is my preacher, the second one is this Aldo Leopold guy that I keep quoting, and the third is my departed bird dog, Suzie.

Preacher Paul. Preacher Paul Shero preaches at the Southgate Church of Christ. He'd love to see any of you all out there in the morning. It's on the south side of town. He conforms pretty well to Mark Twain's idea that few sinners are saved after the first 20 minutes.

Now if he ever starts a sermon by saying, I want you all to know I'm not mad at any of you, what is he prefacing the congregation for? Is it grace and salvation or fire and brimstone? Fire and brimstone. He also says, You're free to choose your actions, but you're not free to choose the consequences. Let me repeat that. You're free to choose your actions, but you're not free to choose the consequences.

And if that applies to teenagers on a back road, it applies to what's going on in the back forty; it applies to basically everything that you all talked about today. Right? He also has a couple of other philosophies. You own a dog and you feed a cat.

And he'll tell you it's easier to find a new audience than it is to find a new sermon. So Paul's always anxious to visit other congregations. And he catches my attention every now and then. I don't sleep very often; he really is a good preacher, best I've ever heard.

At one time he preached on the parable of the sower, Galatians 6. And I thought this would be appropriate, as there are four main points in that sermon. As you sow, so shall you reap; you reap more than you sow, or you hope to; you reap in a different season than when you sow; and you can't change last year's crop.

So, again, these are some pretty important living points, I think, that we need to think about there. Again, I work primarily with landowners, ranchers out in this part of this world, and so sometimes we meet in various locations. I want to use the backdrop of the North Concho River. We had a Brush Appreciation Day out there about 2002.

Now, I realize this is a highly educated group. Sometimes I have to explain to the groups I'm talking to about what paradigm shift is, but you folks all know about paradigm shifts. There have been some major paradigm shifts everywhere, but out here in West Texas some of them would be row binders versus round balers.

Is there anybody here who's ever ridden on a row binder? A couple of you have. I mean, I'm impressed. Were you at that inaugural meeting of the Philosophical Society? Jeeps versus ATVs, green ketchup. Any of you remember green ketchup? I worked in a sale barn too long to enjoy green ketchup.

Dodge pickup trucks. Any of you drive a Dodge pickup truck? Hey, man, that's a success story now. You know, it used to be the Soil Conservation Service and Texas Tech graduate students. Digital cameras, cellular phones, all these are radical changes in the way things happen. And that last one is the basis for land values. When Mr. Powell's family was settling this country, the basis for land value was what? How many sheep he could run? How many cattle? How much wheat? How much cotton he could grow?

That's not necessarily the same today. Over the last 15 years it's kind of changed. And it's changed to this, towards this side where wildlife interest, hunting leases, and so forth are dictating the demand for rural land and wildlife-based recreation. In fact, one realtor that I work with from Lubbock says, in a very slow West Texas drawl, We don't sell ranches to ranchers anymore. That's

a major paradigm shift. And there are both positive and negative consequences that come from that.

As you visit with landowners, they fit somewhere along this continuum of goals. Down there I've got a camouflage hat to represent the wildlife interest; over here I've got a Stetson hat to represent livestock interest. And I will often walk along that continuum and say, How many of you fall right here, and how many of you fall here? Because if you'll tell me where you fall in that continuum, I can help you devise a management plan.

But you can't be down here and want to maximize wildlife, because they're just not compatible. You just can't maximize both at the same time. So I always get landowners to strive for the headwear of a camouflage cowboy hat. Some are a little more camouflage than others, but if they'll help me decide, then we can define strategy for their management, for their stewardship.

This is the North Concho River between here and Sterling City. Again, it is the site of some state-funded brush control on the premise that brush control equals water yield for O.C. Fisher Reservoir. I got up in a helicopter one time and just took some photos because the landowner goals are pretty apparent from 5,000-10,000 feet. You can get up there and get a pretty good idea of what their goals are, what their motivations are by looking at the landscape.

I'll show you some examples. These are all within about 10 miles. So you see varying degrees of what I call brush sculpting, using brush control as a way to create habitat out there. Which one of those do you think probably has the greatest interest in livestock, and the least interest in wildlife?

The lower left. Right. Yes, he's put a grazing easement on that property. Won't have to worry about hunters bothering him. You know, a lot of landowners out here in West Texas say hunting is a relative thing. The better the hunting, the more relatives you've got come Thanksgiving.

So, who's right? This is a philosophic group; here's a philosophical question: Who's right? Each one of those landowners is right. It's his property, his or her property; they can do with it what they darn well want to. So that's a bundle of rights that we call private property rights in Texas, and if you think I'm not proud to be in the State of Texas in private property, you're wrong, because I am.

MALE VOICE: What's the upper left?

DR.ROLLINS: That's strips. It's dog-legged like that because he doesn't want his hunters to have over about a 300-yard shot, because if the deer stepped out at 700 yards, they'd try to shoot it and they couldn't hit it, so he wants to limit how far they can shoot.

Okay. Moving on with Aldo Leopold. Very eloquent author. How many of you have ever read Aldo Leopold? All right. Outstanding. You are a philosophical group. *Sand County Almanac*? All right. That's a great one. It'll set you back about six bucks on amazon.com. But get that one. Start out with the chapter called "Thinking Like a Mountain."

“Thinking like a mountain.” One of the last words, or one of the last sentences says this, Only the mountain has lived long enough to listen objectively to the howl of the wolf. Think about that. What’s the key word there?

Objectively, objectively. We could insert that by global warming, or a lot of the other issues probably that come up. Anyway, he’s written seven books and, again, I encourage you; he’s one of my heroes. He said that one of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise.

I have read many definitions of wildlife conservation and written a few myself. But I suspect that the best one is written not with a pen, but with an ax. It is a matter of what a man thinks about while chopping or while deciding what to chop. A conservationist is one who is only aware that with each stroke he’s writing his signature on the face of his land. Signatures of course differ, whether written with an ax or a pen, and this is as it should be.

So he’s not trying to be judgmental. He’s just reminding us. And this was written back in the ’20s and ’30s. What do we know about the status of our natural resources as a whole during that time period? We were hurting.

Conservation is a state of harmony between men and the land. Despite nearly a century of propaganda, progress still consists largely of letterhead pieties and convention oratory. On the back forty we still slip two steps for each forward stride. 1949. I wanted to share that one with you.

At the Bobwhite Brigade we march to cadences, conservation cadences. One of them goes like this, Many ranchers do declare, they’ve got too much prickly pears. It’s a thorny plant that they despise, but it sure looks good through a quail man’s eyes.

“The outstanding scientific discovery of the 20th century is not television or radio, but the complexity of the land organism.” Chew on that one. Think about global climate change, all the factors, experimentally all the confounding factors. You know, if you’re looking to science for some of these answers that you wanted, the scientists will be the first ones to say, You can’t test that. It’s just too confounded with other factors. “Conservation is a bird that flies faster than the shot we aim at it.”

This ‘ol boy’s ridden behind a bird. Leopold coined what in the literature is called an ecological conscience. He said that the acid test on whether or not you have an ecological conscience, I guess, is this, a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it does otherwise.

In my case, as I deal with kids and conservation education of our youth, a favorite saying is an old one that you’ve maybe seen on a church marquee somewhere. It says “One generation plants the tree and another enjoys the shade.” And we’ve made a reference to that several times today.

This guy’s about six-foot-seven; he’s standing out there on this beautiful quail property in Stonewall County and Leopold might have said this, Our children

are our signature to the roster of history. Our land is merely the place our money was made. There is as yet no social stigma in the possession of a gullied farm, a wrecked forest, or a polluted stream, provided the dividend sufficed to send the youngsters to college. I left out the next sentence which goes, Whatever ails the land, the government will fix it.

All right. That's my paid part. I want to share now with you some bird dog philosophy. These are life lessons. It doesn't have anything to do with stewardship per se, but I hope that you'll see it as a fitting end to our day, and maybe you'll be able to nod your head on certain things.

I'm a pretty optimistic, positive kind of guy. I've got the greatest job in the world and I love it, and I don't take that for granted. I'm not want one to mire myself in self-pity. But back in about 1997, I had a couple of things happen, and I was the subject of a couple of letters to the editor. If you're the subject of a letter to the editor two weeks in a row, people in College Station perk their ears up. So I was feeling a little bit sorry for myself I guess. And they begin questioning why you did this or why you said that. And I had a bird dog named Suzie, and there's nothing more therapeutic to me than that warm set of brown eyes and that cold nose there that was ready to help me through whatever trials and tribulations I might have. With Suzie's help we wrote what we call Suzie's 12-point plan for success. I've added two more since her death in 2001.

I've got to tell you right here that I'm quite anthropomorphic. I give human qualities to non-humans. Sorry about that. I think dogs, my dogs talk to me. My dogs communicate to me very, very well. And I'm like the old saying that says, I like most dogs more than I do most people.

This is Dot, Suzie's first daughter on our left, Little Annie on the right. This is the first quail hunt after the death of their mother. And, again. I probably read way too much into this, but as I look at the expression on Dot's face, being the older of the two dogs here, I just want to say she's thinking, reflecting back, pausing, reflecting, what was the term for that? *Selah*—to pause and reflect. I always give this as a vespers prayer when I'm on the last night of the Bobwhite Brigade after we'd been through four days of pretty intense schedule, so consider yourself emotionally drained, and after a full day, you probably are.

So this is Suzie's 12-point plan. Point number 1, always hunt with good dogs. Always seek to surround yourself with people who are smarter, faster, better than you in every capacity because you're going to play at the end of the competition, whether we're talking about business, whether we're talking about 8-ball, or shooting skeet.

Number 2, hug your giants. This was Suzie's last hunt, December 28, 2001. And at the end of that day, I just—all I wanted to do was sit there and hug her. She had chronic kidney disease and was no doubt going to be put down here about four days later. This was her last hunt and it just reminds me that you never know when your giant's going to be gone. Hug your giants while you've got an opportunity. We all have giants in our life. I spoke of Leopold. This is my former boss, Don Steinbach, who lit and kindled the fire in my gut for conservation education. So just never miss the opportunity to hug those giants.

Point number 3, be afield whenever possible. The dog in the kennel barks at his fleas, but the dog that is hunting does not notice them. If you stay focused on what's driving the train, you don't let the little things get you get down.

Point number 4, go the extra mile. This was on about December 18, 2001, about ten days before Suzy died. You'll notice she looks pretty frail. I was going hunting that Saturday morning on a ranch up by Sweetwater. Got ready to leave about 6:30 that morning, told my wife where I was going. She said, "You're not taking Suzie, are you?" I said, "Yeah, I'm taking Suzy." She said, 'Dale, she's too frail; she can't stand it. She won't be able to.'" I told her right there, and I'm telling you right now, if I'm ever on my death bed and somebody's going quail hunting, you better carry me.

Do you notice two key things, if you can see them? One is the blood tip on her tail. You know what that means in bird dog parlance? It means she didn't take the easy route; she was working the brush. She took the road less traveled. And down on her right, on her forepaw that she's pointing, she's been on doggy dialysis for a week. That kind of motivation, that kind of drive, that's something that we appreciate.

Point number 5, and boy is this one appropriate today, dismiss the meadowlarks. If you're a bird dog, you've got one function and that's to point quail, not point rabbits, not point meadowlarks. Stay focused.

Point number 6, approach unknown situations. What sounds like game might be a porcupine, might be a rattlesnake, might be some kind of booby trap. I tell the kids, you've got some God-given instincts; use them to assess the situation. Move downwind before you approach.

Point number 7, look good. Good is both adjective and an adverb. As adverb, it means search diligently. Leave no stone unturned. Look good. Be proud, but not prideful. Be aware of the way that you handle yourself, and always make a good first impression.

Point number 8, that's Suzie when she won my heart in June of 1991. We dangled a cane pole with a quail wing on it out there and she struck that pose at seven weeks of age and stole my heart. Point number 8, invest in the future. Do something with kids. Mr. Bamberger gave us a great track record of what's he's done there. Coach Little League, teach Sunday school, take a kid hunting or fishing, but invest in the future.

Point number 9, and I must have 10,000 photographs of my dogs pointing, avoid mediocrity. If there's one that I could have taken a wood-burning pen and carved into it my forehead, it would be point number 9.

Today's society condones mediocrity; it accepts it. I feel sorry for a school teacher in the public school system because they've been forced to live under that mandate. Bull Halsey said, Mediocrity is a sin. Don't just do your bit; do your best.

Point number 10. I don't even have to explain what vocation/avocation is to this group. Be thankful that your vocation and your avocation are one and the same. That's a bond; that's a commonality that I share with my bird dogs. And every time that I back out of the driveway and those dogs go to barking and they're all looking at me, you know what they're saying? You stupid sucker,

where are you going? You're not taking us. Here it is quail season, and you're wasting time.

After Suzy's death—I had to have her euthanized on January 2, 2002. The last two hours before I carried her to the vet, she sat in my lap and we watched video tapes of quail hunts past. And every time she pointed, I cried. I carried her to the vet, and basically he said, Well, you don't have to go in there. I said, Yeah, I do. And when she went limp in my arms, it really tore a good wound in my heart. Again, I get silly about my dogs, I guess, but maybe you can appreciate that.

So I added two more points after Suzie's death. Point number 11 is sign your work. Suzie's point was a sickle-tail point. That's not the proper style for a bird dog, you know, they really like to have it like this. But it didn't matter to me. When the sickle tail was down, I told people the stinger was down. It was like a scorpion's tail. The quail were right there in front of her. Sign your work.

This is Suzie's last quail, December 28, 2001. I've killed a lot of quail in my life. I had three other dogs out there, and they had ran by and not pointed, and all of a sudden Suzie points. And I said, Dear Lord, this is just too good to be true. I said, Please don't let me miss this quail. And the quail come up, and it was like it was flying in slow motion, and I shot the quail and Suzie found it, and we took our last photo together right there. But point number 12 is life is short; make every day count.

It's been a pleasure being with you all here. I hope you have a good day.

MR. GEORGE: Thank you all for your time. We appreciate it. Thank you. We hope you learned something.

MEMORIALS

MARY ELIZABETH SUTHERLAND CARPENTER
1920–2010

A sixth generation Texan, Mary Elizabeth “Liz” Sutherland Carpenter (1920–2010) was a writer, feminist, reporter, media advisor, speechwriter, political humorist, public relations, expert and public servant. Most importantly, she was a devoted parent and a wonderful, loyal friend. Liz was born in Salado, a community in southern Bell County. Her family home in Salado was declared a state historic monument in 1936; in 1967, a plaque was unveiled to indicate that Liz Carpenter was born and lived there. As was her wish, her ashes are scattered among the wildflowers in the prairie surrounding the statue of her great-grandfather, who was the founder of Salado and a veteran of the Civil War.

At age seven, Liz moved to Austin, where she launched her journalism career at Austin High School as the editor of the school paper. Les Carpenter served the paper as business manager. They became best friends, majored in journalism at The University of Texas at Austin, and worked together on *The Daily Texan*. Les supported Liz when she ran for and won vice president of the student body, the first woman to hold that position. They married in 1944 and opened the Carpenter News Bureau in Washington, D.C. For the next sixteen years, Liz covered Congress and the White House for Texas newspapers.

After working as a reporter for the 1960 Democratic Convention, she joined the staff of Lyndon B. Johnson in his campaign for vice president on the Kennedy-Johnson ticket; upon their win, she became the first woman executive assistant to the vice president. One of the most memorable moments in her life occurred when she wrote the fifty-eight words that Johnson spoke on his return to Washington after President Kennedy’s assassination: “This is a sad time for all people. We have suffered a loss that cannot be weighed. For me, it is a deep personal tragedy. I know that the world shares the sorrow that Mrs. Kennedy and her family bear. I will do my best. That is all I can do. I ask for your help and God’s.”

When Johnson became president, Liz became the first professional news-woman to be press secretary for Lady Bird Johnson, for whom she also served as staff director. The first lady and Liz formed a friendship that endured for sixty years until Mrs. Johnson’s death in 2008.

After her years in the White House, Liz joined Hill and Knowlton, a public relations firm in Washington, D.C. In 1971, she was one of the founders of the National Women’s Political Caucus, which was devoted to electing more women to office in the United States. She also became co-chair of ERAmerica,

traveling the country to work for passage of the Equal Rights Amendment. She was appointed by President Gerald Ford to the International Women's Year Commission, by President Jimmy Carter to serve as Assistant Secretary of Education for Public Affairs, and by President Bill Clinton to serve on the White House Conference on Aging.

After Les Carpenter died in 1974, Liz returned to her beloved Austin. She said, "Family roots, the love for Texas and the University of Texas and the LBJ Library brought me back home." She purchased a home in West Lake Hills with a beautiful view of the Austin skyline, including the University of Texas Tower and the Texas Capitol. She named her home "Grass Roots," with its glass etchings on the front door of side-oats grama, little bluestem, and other Texas prairie grasses. Here Liz entertained politicians, elected officials, University of Texas presidents, fellow writers, her good friends like Lady Bird Johnson and Barbara Jordan, and countless others with warm hospitality, good humor, and an occasional dip in her hot tub. Liz had a big heart, and her love for people filled the house, spilling out to the lawn where the deer that she fed roamed freely. Music, poetry, history, and laughter; all were dear to her heart and she loved to sing, to read poems, and to tell stories with friends.

Liz is survived by her daughter, Christy; her son, Scott, and his wife, Jean; a grandson, Rev. Les Carpenter, and his wife, Kristin Sanders; and a step granddaughter, Bonnie Bizzell. Liz adored her family and was very proud of them and of their accomplishments.

A hardworking speaker and author, Liz published a number of books: *Ruffles and Flourishes* (1969), her account of her White House experiences; *Getting Better All the Time* (1986), a book about growing old with joy and humor; *Unplanned Parenthood* (1994), about raising her deceased brother's three children; *Start with a Laugh* (2000) gives humorous advice on speechwriting; and *Presidential Humor* (2006), a compilation of quips and quotes. Liz wrote countless articles and gave countless speeches in large and small towns in Texas and throughout the United States. Gloria Steinem commented of Liz, "She manages to phrase issues the way people experience them, rather than using all those words that end in t-i-o-n and deaden your brain."

A Democrat to the core, Liz campaigned across the country for Lyndon Johnson, Jimmy Carter, and Bill Clinton. She traveled throughout Texas, visiting many small towns in the Piney Woods and the Hill Country campaigning for Ann Richards, Lloyd Bentsen, and others. Liz and her troop would arrive on the town square, on courthouse steps, or even in a parking lot where they would set up the microphones, begin the music to attract a crowd, and close with the "speakin'" before moving on to the next stop.

Liz won many awards in her life. She was very proud to be named a Distinguished Alumna of the University of Texas in 1975; a Distinguished Alumna of the UT College of Communications; and recipient of the Pro Bene Meritis Award, which is the highest honor bestowed by the UT College of Liberal Arts. She was named to the Texas Women's Hall of Fame by Governor Mark White. A distinguished member of the Philosophical Society of Texas, Liz arranged a panel of writers, including Stephen Harrigan and Elizabeth Crook, who read

from their work to set the stage for the Program on the Land in 2001.

The Liz Carpenter Lectureship in the UT College of Liberal Arts was established in 1984 by her friends at the Foundation for Women's Resources, who invited Erma Bombeck, Lily Tomlin, and Mark Russell to Austin for a performance at the Paramount Theater to raise funds for it. Her lectureship has featured President Bill Clinton, President Gerald Ford, Hillary Clinton, Jehan Sadat, Maya Angelou, Bill Moyers, and Jane Goodall; writers such as Betty Friedan, Nora Ephron, Shana Alexander, and Jean Auel; and nationally known humorists such as Fannie Flagg and performer Carol Channing.

For the past seventeen years, the Liz Carpenter Award, administered by the Texas State Historical Association, has been given annually for the best scholarly book on the history of women and Texas. I established the award to honor my friend Liz Carpenter "for her commitment to the pursuit of the history of women in Texas and for a lifetime of achievements that qualify her as a maker of that history." As long as she was able, Liz would come to the Texas Women's History Luncheon at the TSHA annual meeting to personally give the award. Winners of the Liz Carpenter Award have included Debbie Mauldin Cottrell's *Pioneer Woman Educator: The Progressive Spirit of Annie Webb Blanton* (1993); Ruth Winegarten's *Black Texas Women: 150 Years of Trial and Triumph* (1995); Elizabeth York Enstam's *Women in the Creation of Urban Life: Dallas, Texas, 1843-1920* (1996); and Judy McArthur and Hall Smith's *Minnie Fisher Cunningham: A Suffragist's Life in Politics* (2003).

Perhaps Liz's greatest legacy is the men and women, including her family, whom she mentored, cajoled, and stretched beyond what they thought were their abilities. Luci Baines Johnson said it best, "I have had an infinitely more exciting and worthy life because Liz was my mentor and my friend. There are thousands like me who feel the same."

E.C.T.

JESS JENKINS GARRETT
1914-2010

Jenkins Garrett died in Fort Worth on January 28, 2010, at the age of 95. He was an integral force within the Texas State Historical Association throughout much of his long life. He was a life member, having served as president of the organization (1988-89) and on the Executive Council. He was also president of the Collectors' Institute (1968-80), which was cosponsored by the TSHA.

Jess Jenkins Garrett (called Jenks or Jenkins by his friends and family) was born on December 14, 1914, in Caldwell, Texas, the son of Jesse and Sudie Garrett. Jesse Garrett was an up-by-your bootstraps attorney in Caldwell who was later called to the Baptist ministry at Rosen Heights Baptist Church in Fort Worth, while Sudie Garrett was a Baylor music graduate.

Jenkins Garrett's formative years were spent in Fort Worth. He attended Sam Rosen Elementary School, North Side Junior High, and North Side High School, where he graduated in 1931, at the age of sixteen. Two years before he

graduated from high school, the Leonard Brothers Store hired him as an office boy. His pay was five dollars a week and a bicycle. His dedication and enthusiasm for his work was noticed by J. Marvin (“Mr. Marvin”) and Obadiah Paul (“Mr. Opie”) Leonard, the store’s owners, and they soon developed a personal relationship with him. From this point on, his life and career became closely interwoven with the Leonard family.

Garrett entered the University of Texas (UT) in September 1931. His career goal was to become an attorney like his father had been, so he enrolled in a six-year program where he could earn an undergraduate degree and a law degree. At the university he became immersed in campus life, participating in the activities of the Baptist Student Union and the YMCA, joining the debate team and the Tejas Club, and serving on the Judiciary Council and President of the Student Association. He graduated in 1937.

It was at UT where his interest in history was piqued. This happened during a U.S. History survey course taught by noted historian Walter Prescott Webb, whose ideas inspired him to begin reading more about Texas and the American past. From UT, Garrett entered Harvard Law School, graduating with a master’s in legal letters in 1939. He practiced law with the Fort Worth firm of Walker, Smith, and Shannon until U.S. entry into World War II looked imminent in 1941.

In 1941, he resigned his position with the firm and entered the FBI. While with the FBI, he worked on the West Coast and married Virginia Williams of Fort Worth on November 26, 1941, in San Francisco, just days before the bombing of Pearl Harbor. He had met Virginia at Rosen Heights Baptist Church. Garrett spent the war years working with the FBI in California and later as regional counsel for the War Production Board in Dallas.

After the war, he joined the Leonards as their house counsel, a position he held until 1965, when he and Robert Stahala opened their own practice. The small two-person office allowed Garrett the freedom to not only practice law but also to pursue personal interests and public service. He became of counsel with the Fort Worth firm of Harris, Finely, and Bogle in 1992.

He pursued no interests with more vigor and zeal than collecting. He began collecting historical material in earnest in the late-1950s and was “infected” (in his own word) with the collecting disease for the rest of his life. His collecting “compulsion” (again, his word) motivated him to build one of the finest private libraries focusing on Texas and the U.S. War with Mexico, according to Harry Ransom, former chancellor of the University of Texas System and an inveterate collector himself.

Garrett admitted that his primary reward as a collector was to see his work of many years used and appreciated by students, scholars, and the general public. To this end, he and his wife donated his Texas and Mexican War collections to the University of Texas at Arlington (UTA) starting in 1973, where they became the impetus for the university to build an outstanding department of Special Collections on the sixth floor of the Central Library.

At the time of the initial donation to UTA, the Garrett collection consisted of more than 10,000 items, including books, broadsides, newspapers, graphics,

manuscripts, sheet music, currency, and historical materials in other formats. He and Virginia did not stop there. They continued to support the library by donating literally thousands of other historical resources to UTA during the decades following the original gift. Garrett also helped the library raise funds, cultivate other donors, and promote the collection.

In addition to his accomplishments for UTA, Garrett left an indelible mark on his city, state, and nation. He is perhaps best known for his service to higher education in Texas. For example, he served on the Board of Trustees for Southwestern Baptist Theological Seminary, on Governor John Connally's Committee on Education Beyond the High School Level, served as the founding chairman on Tarrant County Junior College District's Board of Trustees, and on the UT System Board of Regents. The University of Texas at Arlington named Garrett an Honorary Distinguished Alumnus in 1985 and University of Texas at Austin named him a Distinguished Alumnus in 1995.

Garrett received numerous awards for his accomplishments, collecting pursuits, and philanthropy, including the Association of Texas Colleges and Universities' Mirabeau B. Lamar Award (1981), Southwestern Baptist Theological Seminary's B. H. Carroll Award (1985), North Fort Worth Society's Tad Lucas Life Achievement Award (1987); Tarrant County Bar Association's Blackstone Award (1988); Golden Deeds Award of the Fort Worth Exchange Club (1990), the Philanthropic Award of the Texas Library Association (1991), the William E. Jary Jr. Award presented by the Tarrant County Historical Commission (1991), the American History Medal of the National Society of the Daughters of the American Revolution (1994), the Sir Thomas More Medal of the University of San Francisco's Gleason Library (1998), and the Award of Excellence in Preserving History sponsored by the Texas Historical Commission (2003).

Garrett was an active member in numerous professional, historical, social, and civic organizations, and served in leadership positions in each one. Along with the TSHA, these are the Tarrant County Bar Association, the Fort Worth Historical Society, the Philosophical Society of Texas, the Texas Map Society, the Society for the History of Discoveries, the Exchange Club, the Fort Worth Club, the Shady Oaks Country Club, the Ridglea Country Club, the Fort Worth Rotary Club, and the Philip Lee Phillips Society.

Garrett made significant contributions in writing and publishing, with perhaps his most important work being his massive bibliography entitled *The Mexican American War of 1846-1848: A Bibliography of the Holdings of the Libraries, The University of Texas at Arlington*, published by Texas A&M University Press in 1995. This work has become a "must have" for librarians, scholars, and collectors interested in the Mexican War.

Garrett was a proud member of the Society for forty-four years, having been inducted in 1966. For 1984, he served as president, organizing the annual meeting in Houston, on the subject of "Discoveries: Breakthroughs on the Present Limitations of Knowledge and Their Significance to Our World." The topic was inspired by Garret's ruminations following his reading of *The Discoverers* by Daniel Boostin of the Library of Congress. He had noted that just as the early discoverers, the subjects of the book, brought new knowledge to the world in

which they lived, the world of 1984 was also in a new age of discovery in many fields of inquiry. Garrett served on the Board of Directors of the Society for eight years, before and after his year as president. His family members were his regular and enthusiastic guests at the annual meetings.

He is survived by his wife of sixty-eight years, Virginia; his children Donna Garrett, Dianne Powell, and Jenkins Garrett Jr.; grandchildren Vanessa Vaughan, Holt Vaughan, Sarah Petty, Kate Garrett, Laura Powell, and Leilah Powell; and five great-grandchildren.

Portions of the memorial were originally published in Volume CXIII, No. 4 of the Southwestern Historical Quarterly.

Gerald D. Saxton
Dean of Libraries at the University of Texas at Arlington

WILLIAM H. GOETZMANN
1930–2010

Ideally, academics contribute something of significance to a discipline. But every once in a while, a scholar comes along who transforms his field. William H. (Bill) Goetzmann helped shape American studies both through both his writings and his nation-wide influence as a teacher and mentor.

Among his many books, *Exploration and Empire: The Explorer and Scientist in the Winning of the American West* won the Pulitzer Prize in History and the Francis Parkman Prize of the Society of American Historians and changed the view of historians about how the west was settled. *Exploration and Empire* displayed Goetzmann's characteristic blend of imagination, prodigious scholarship featuring original documents, and the ability to tell a good story. In reviewing the book, *The New York Times* said that Goetzmann had "achieved a feat of historical discovery as notable in its own way as were some of the physical excursions into the West that he describes so well."

When *Exploration and Empire* appeared in 1966, Goetzmann had already moved from his original scholarly home at Yale, where he had taught from 1955 to 1964, to the University of Texas at Austin, where he founded UT's American studies program in 1967 and served as its chairman until 1980, leading it to become one of the top programs in the country.

In addition to receiving many honors and awards, Goetzmann participated as a member of the Texas State Historical Association, the American Philosophical Society, and the American Academy of Arts and Sciences, and served a term as president of the American Studies Association.

As a scholar and leader, Goetzmann helped to define American studies as a whole, especially in its emphasis on multidisciplinary approaches and ways of telling stories. His broad interests included not only explorations of the west but also modernism, photography, the history of science, and American intellectual history. Engaged in scholarly work up to the end of his life, he published *Beyond the Revolution: A History of American Thought from Paine to Pragmatism* the year before he died.

Goetzmann directed over sixty doctoral dissertations and fifty masters theses and was one of those teachers whom students recall many years later as the key influence on their intellectual lives. One such student, Stephen Pyne, wrote an online memoir of Goetzmann (“A Beautiful Mind”) in which he said:

He was most at home in the long 19th century. He appeared to know everything and everyone and never tired of discussing its historical cavalcade. He was always curious, ever bristling with ideas, endlessly encyclopedic, and at times a Romantic empiricist. He had a bottomless capacity for detail, yet managed to hold it all within a sweeping vision, like an explorer—a Humboldt, perhaps—standing at a mountain pass and surveying the landscapes ahead and behind. There was passion behind the vision, at times a manic or even trance-like quality; *Goetzmannia*, we called it.

Goetzmann was a teacher not only to his own students but also to the wider public. In 1986, for example, he developed a popular PBS documentary series, “The West of the Imagination.” For UT-Austin, however, Goetzmann’s influence went beyond his discipline. He used his academic stature and position to introduce courses in women’s studies, Hispanic studies, and black history at a time (the late sixties) when such courses were not to be found in most history or American studies departments. He was also instrumental in hiring the first African-American members of the liberal arts faculty.

He remained a Texan until the end of his life, mentoring students who are now academic leaders in American studies throughout the country. He was proud of the successes of his students – and deeply proud of his family, including his wife Mewes, his three children, William N., Ann, and Stephen, and his five grandchildren. He collaborated with his son William on *The West of the Imagination*, and numerous tributes from former students attest to his abilities as an editor and encourager of their work.

One of his younger colleagues, Robert Abzug, who later became chairman of the UT American studies program, said that Bill Goetzmann “was one of the most distinguished humanists to serve on the faculty of The University of Texas at Austin” and that he imbued his students with:

a commitment to daring and thoroughgoing, innovative research that propelled them to positions of leadership in their various fields and institutions. He inspired fear, trembling, hard work, and devotion among those who studied with him. They understood that he was asking of them no more than he asked of himself. Most of all, he was at his best the living model of a mind on fire—humorous, outrageous, mesmerizing—a creator of ideas and insights who held seminar and lecture audiences under the spell of his own joy.

B.S.F.

WILLIAM E. GORDON
1918–2010

William E. Gordon, an electrical engineer who conceived, designed, built and operated the world's largest radio telescope, which has been described as Earth's ear to outer space, died on Feb. 16 at his home in Ithaca, New York.

The telescope, a dish the size of 26 football fields, occupies a small valley in Puerto Rico. It is big enough to emit the strongest radio waves and receive the weakest ones. Dr. Gordon named the telescope and its observatory after a nearby town. The Arecibo Observatory has been used to make scores of landmark discoveries in atmospheric physics and astronomy, including one that garnered a Nobel Prize.

It was the first instrument to accurately measure the rotation of Mercury, where it also detected ice. It furnished detailed maps of the Moon, Venus and Mars. It provided the first solid evidence that neutron stars exist. It discovered the first planets outside the solar system. It created the first three-dimensional images of the universe.

The telescope can track asteroids veering near the Earth much more accurately than other instruments. It listens for minuscule signals from distant space that might suggest intelligent life.

Paul Cloutier, a retired professor of physics and astronomy at Rice, stated that Arecibo has "the capability of producing a detectable signal clear across the galaxy and a sensitivity to be able to receive a signal from anywhere in the galaxy."

William Edwin Gordon was born on Jan. 8, 1918, in Paterson, N.J. He earned bachelor's and master's degrees from what is now Montclair State University and enlisted in the Army in 1942. An early assignment was studying why radar can be very effective hundreds of miles away and ineffective at just a few miles.

A colleague persuaded him to pursue this interest at Cornell University, where he researched how radar signals behave in the uppermost part of Earth's atmosphere, the ionosphere. It was his desire to measure the properties of electrons 2,000 miles up that led him to radio telescopes. Nobody had built one remotely big enough to catch the minute signals he was after.

In praising Dr. Gordon's achievement at Arecibo, the Institute of Electrical and Electronics Engineers in 2001 pointed out the difficulty he had faced: All the energy collected by radio telescopes until then over 60 years had amounted to no more than the energy of a few raindrops hitting the ground.

Dr. Cloutier said that part of Dr. Gordon's success was casting his project as a military endeavor, when his personal interest was the pure scientific one of studying the ionosphere of Earth and other planets. Dr. Gordon told the Defense Department that the observatory would be able to pick up faint Soviet radio signals bouncing back to Earth from the Moon. Its research arm supported the project.

The receiver's huge size was another problem. Much smaller receiving dishes had been suspended on platforms and collapsed under their own weight. Dr.

Gordon decided that the solution was to mount the dish on the ground. After many aerial surveys and tramping through the snake-infested countryside, he found a limestone sinkhole in which tobacco was growing. It would cradle the dish. His design called for a metallic dish with a diameter of 1,000 feet; the biggest radio telescope at the time was just 150 feet across.

“We were taking a pretty big leap,” Dr. Gordon said in an interview with *The Houston Chronicle* in 2001. “They didn’t know whether I was a crackpot or whether I really had something.”

The observatory was completed in 1963, five years after Dr. Gordon had the idea, at a cost of \$9.3 million, and it has been significantly updated several times. The huge, curved dish of the telescope acts as a reflector, bouncing back radio waves to a movable focal point suspended overhead. Computers interpret the data received. It is operated by Cornell through the National Astronomy and Ionosphere Center for the National Science Foundation. Dr. Gordon was director for the first two years. With upgrades, Arecibo has become 10 times more sensitive every 10 years, and can now chart chemical phenomena that occurred in galaxies billions of years ago.

Perhaps its most noteworthy use came from a series of observations that began in 1974 by Dr. Joseph Taylor of Princeton and his student Russell Hulse. Their work, for which they were awarded a Nobel Prize in 1993, was the first proof that gravity waves, never directly detected but predicted by Einstein’s General Theory of Relativity, actually exist.

Dr. Gordon taught at Corell from 1953 until 1965, when he moved to Rice University where he served as professor, dean, and provost, retiring in 1985. With Norman Hackerman, a former Rice president, he is one of only two Rice faculty members to be given the title distinguished professor emeritus.

Dr. Gordon’s wife of more than 60 years, the former Elva Freile, died in 2002. He is survived by his second wife, the former Mary Elizabeth Bolgiano; his son, Larry; his daughter, Nancy; four grandchildren; and three great-grandchildren.

At Arecibo’s 40th birthday in 2003, Dr. Gordon said he and his colleagues had not remotely grasped the challenges they faced. Their saving grace, he suggested, was that they “were young enough that we didn’t know we couldn’t do it.”

Douglas Martin

*(The memorial by Douglas Martin was originally published in
The New York Times from February 28, 2010.)*

GEORGE F. HAMM

1931–2010

A member of the Philosophical Society since 1993 until he passed away on October 10, 2010, George F. Hamm, PhD, was President Emeritus of The University of Texas at Tyler. Dr. Hamm served as president of the university from 1981 to 1998, leading it through an era of dynamic expansion and broadening its commitment to intellectual development, aca-

democratic excellence, and community service. He would have been very pleased that the 2015 meeting of the Philosophical Society of Texas is in Tyler!

Dr. Hamm's death followed a lengthy illness. He was born June 26, 1931, in Rapid City, South Dakota., son of Michael and Mae (Howard) Hamm. He lived life with high energy, with faith, and with a boundless belief in the power of higher education to transform lives not only in East Texas, but also in Texas and the United States. His enthusiasm was inspiring and served to energize his community to invest in UT Tyler.

Dr. Hamm was a devoted member of Immaculate Conception Cathedral in Tyler where his Requiem Mass was held on October 14, 2010. His burial was in the Cathedral in the Pines Cemetery in Tyler.

In honor of his contributions to the development of UT Tyler, the UT System Board of Regents conferred on him the title of President Emeritus in 2003, stating: "One of Dr. Hamm's most significant accomplishments was his leadership in working with the legislature and other community leaders in elevating UT Tyler to four-year status in 1997."

When he announced plans for retirement, Dr. Hamm described his years at UT Tyler "as the best and happiest years of my professional life," and stated, "With each succeeding year, Janie and I have accumulated greater numbers of friends and more enduring relations. The university has grown significantly in stature because of its ever increasing numbers of generous benefactors."

One of Dr. Hamm's signature accomplishments was persuading the University of Texas System Board of Regents to fund a UT Tyler Performing Arts Center and then raising private gifts to supplement university funds for construction of the R. Don Cowan Fine and Performing Arts Center at UT Tyler. He established the university's Distinguished Lecture Series, which has featured such speakers as Henry Kissinger, Coretta Scott King, and William F. Buckley.

During his presidency, Dr. Hamm secured approval for establishment of the college of engineering, the first at a state university in East Texas. He worked to create UT Tyler's campuses in Longview and Palestine. New degree programs included master's degrees in nursing, history, mathematics, biology, and political science. His commitment to building and retaining faculty excellence brought scholars from leading universities around the nation to UT Tyler.

Dr. Hamm's leadership also led to construction of UT Tyler's first on-campus student housing, the University Pines complex. The complex was one of the first in Texas to be built entirely with private funds.

In recognition of his commitment to academic excellence, friends of the university established the \$500,000 George F. Hamm Endowed Chair in Arts and Humanities to advance awareness of ethical principles, social responsibilities, and appreciation of the arts and a respect for the dignity and uniqueness of others. In addition, Dr. Hamm created numerous endowed presidential scholarships during his presidency.

One of Dr. Hamm's ongoing priorities was expanding global educational opportunities and pursuing international relationships for the city of Tyler and the university. He cultivated exchange programs with universities in France, Japan, Germany, Poland, and Mexico.

The Tyler Sister Cities Program began in 1982, in large part because of his leadership and energy. Tyler's current sister city relationships established with his support and encouragement include Yachiyo City, Japan, and Jelenia Gora, Poland.

He established the Eisenhower International Golf Classic in 1987 to benefit international scholarship programs. This event, which was continued for 13 years, brought to East Texas such stars as Phil Mickelson, Greg Norman, Payne Stewart, Fred Couples, Annika Sorenstam, and Chi Chi Rodriguez.

At the national and international level, Dr. Hamm served for many years on the board of directors of Sister Cities International. At the time of his death he was a member of the board of the U.S.-Ukraine Foundation.

Dr. Hamm was a graduate of South Dakota State University, where he attended on a football scholarship. He served in Uijeongbu as an officer in the U.S. Army 32nd Infantry Regiment during the Korean War. After the war he earned a doctorate in experimental psychology from the University of Wyoming.

His career in higher education administration and teaching began in 1962 when he was named dean of students at Arizona State University. He went on to become vice president of student affairs, the position he held when he was named president of UT Tyler. Arizona State honored Hamm in 1986 with its University Centennial Medallion as a "Man Ahead of His Times," for providing equal educational opportunities for minorities.

U.S. Rep. Ralph Hall sponsored a congressional resolution commending Hamm in 1998 for his "unmatched leadership and vision to the university." The resolution stated, "As president of UT Tyler, Dr. Hamm dedicated his intellect, talents, and energy to build a first-rate educational institution in East Texas. His goals were for many years' elusive dreams, but thanks to his vision, perseverance and leadership, these dreams have become reality."

In Texas, Dr. Hamm served on the boards of numerous organizations including the Tyler Economic Development Council, Tyler Area Chamber of Commerce, United Way of Greater Tyler, and St. Edward's University in Austin. Texas College awarded him an honorary doctorate of humane letters in 1997 for his enduring efforts with the Texas College/United Negro College Fund.

Dr. Hamm is survived by his beloved wife, Janie; and children, Greg Hamm and wife, Mirielle of Virginia and Jean Marie Glass of Tyler; and six grandchildren. He was preceded in death by two sons, Robert Joseph Hamm and Daniel George Hamm.

How fortunate that we were able to share Dr. George Hamm's lifetime of accomplishments, his energy, and leadership skills to higher education in Texas.

E.C.T.

The memorial originally published in Tyler Morning Telegraph from October 12, 2010, was edited by Ellen C. Temple, Society member and University of Texas System regent during George Hamm's tenure as president of UT Tyler.

THOMAS N. JAMES
1925–2010

Thomas N. James died at his home in Birmingham, Alabama on September 11, 2010. To the countless colleagues who encountered Dr. James during his long career as a premier cardiovascular investigator, he was both a wonderful person and a true academician. Dr. James was a man who combined intense intellectual curiosity, a passion for cardiovascular patient care, a devotion to teaching, and enthusiasm for research. He was a quintessential academician in the truest sense of the word. For those fortunate to have known Tom personally, he was a delightful, warm person, a beloved husband, father, and grandfather, a supportive friend and colleague, and a man of broad interests both within and outside of medicine.

Tom was born on October 24, 1925, in Amory, Mississippi. A Southerner for his entire life, even when living far from his roots, he attended Tulane University, where he earned both his B.S. degree in 1946, and M.D. degree, in (1949). In 1948, he married Gleaves Elizabeth Tynes. They raised three wonderfully talented children, and at the time of his death they had five grandchildren.

Tom devoted his career to a combination of direct clinical responsibilities and the education of physicians and other health care providers across the US and internationally. Although he was called to take on increasing administrative responsibilities, and proved to be as talented an administrator as he was a clinician, teacher, and scientist, he never left his roots. Even when President of the University of Texas Medical Branch in Galveston Tom continued to be active in patient care, teaching, and research. And throughout his career, far in advance of today's concerns about conflicts of interest in medicine, Tom always stressed the importance of the integrity of physicians and investigators.

Throughout his career, at the Ochsner Clinic, the Henry Ford Hospital, the University of Alabama, and at the University of Texas Medical Branch, Tom taught medical students, residents, fellows, and faculty members in clinical settings. He was a highly skilled diagnostician and played an important role in the training of two generations of cardiologists.

The focus of Tom's research was the coronary vasculature and the interaction of the myocardial blood supply with the cardiac conduction system. He was world renowned as a cardiovascular pathologist and for more than 50 years sought out unique opportunities for postmortem studies of the human heart. These studies led him to enter into collaborations with cardiologists, cardiac surgeons, pathologists, and even biologists across the world, from Europe to South America to the Orient and throughout the US. Although much of his work was in human hearts, Tom was before his time in investigating how other species have adapted to their unique cardiovascular demands. He performed highly innovative work in hearts ranging from those of tiny brown bats (*Myotis lucifugus*) to the enormous sperm whale (*Physeter macrocephalus*). Over the years, he amassed collection of slides and electron micrographs that numbered well over 500,000. He published nearly 500 original manuscripts and gave hundreds of invited lectures throughout the world.

As time went by, Tom was asked to take on increasingly important administrative responsibilities in Birmingham and subsequently in Galveston. He did so with great effectiveness, and never did he lose zeal for active participation in clinical care, teaching, and research. In 1973 he was appointed chairman of the Department of Medicine at the University of Alabama in Birmingham, where he led that institution in an era of tremendous growth. In 1987 he was chosen to be President of the University of Texas Medical Branch (UTMB) in Galveston. While President at UTMB, he was elected President of the American Heart Association, President of the International Society of Cardiology, and President of the Tenth World Congress of Cardiology. He was also very active in the World Health Organization during his years in Galveston.

Tom retired from the UTMB in 2004, and because of his failing eyesight was soon thereafter unable to continue his microscopic studies of the heart.

I had not met Tom when I received a phone call from him one day asking me if I would be interested in talking about UTMB. During my tenure at UTMB, I came to appreciate how he and Gleaves gave so much to the institution and its faculty. As he did for so many others, Tom made opportunities available for me that would otherwise have been unattainable—a highlight of which was being admitted to the American Clinical and Climatological Association. In Galveston, Tom and Gleaves were both known for their dedication to building the faculty and the institution, from bricks and mortar to the rose garden they built on the UTMB campus. It would not be an exaggeration to say that the Jameses were a most positive transformative force for UTMB and the City of Galveston.

Marschall S. Runge, M.D.

Article from Transactions of the American Clinical and Climatological Association courtesy of American Clinical and Climatological Association.

PETER CORT MARZIO

1943–2010

“Bespoke” is a word usually reserved for custom-made clothes, shoes, or any other item made to measure, and not often used to describe people. It would be accurate to say, however, that Peter Marzio was a bespoke cultural leader for Texas when he came to Houston in 1982. He was custom made for Houston in particular and fit the city like a glove.

Following the immigration of his father and his father’s three brothers to the United States from Italy, Peter was born on Governor’s Island, New York, in 1943. His father’s early death led to his uncles collaborating in his upbringing.

While attending college on a football scholarship at a small Pennsylvania university, an art history assignment took him to the Frick Collection in New York, where a painting profoundly directed his life.

Perhaps the quiet cathedral aura of the Frick contributed to the moment, but it was the painting itself, *The Forge*, by Goya, the Spanish master, that captured

Peter's heart. A dual doctorate in art history and American history from the University of Chicago led to curatorial responsibility for prints and drawings at the Smithsonian and later, in 1978, remaining in the capital, to the directorship of the prestigious Corcoran Gallery of Art. At both of these distinguished institutions Peter worked devotedly and passionately to democratize the appeal and broaden the reach, extending the arts to a wider audience.

In 1982, not yet forty, he came to Houston as the director of the Museum of Fine Arts, and the city and its new devotee embraced one another immediately.

A football player as director of a Texas art museum? It was unheard of but targeted and tailored to reach the core of an evolving region that was ready for additional cultural offerings to add to its mystique.

Peter gave Texans his version of the fine arts in spades. Expansions, the Garden by Noguchi, capital campaigns, and advisory councils were among the many ways in which his bigger than life persona communicated itself to Houston.

He managed, in his nimble way, to both celebrate the treasures of the past and recognize the new. The old guard, the new guard, and the unguarded all responded equally to his passion for art and the many ways it could enrich lives. Excellence and innovation were cornerstones of Peter's makeup and earned wide respect. National recognition of his leadership was evidenced by his presidency of the Association of Art Museum Directors and chairmanship of the Federal Council on the Arts and the Humanities.

His writings on art, philanthropy, chromolithography, and masterpieces at the MFAH are treasured volumes in Houston libraries.

Among his other prolific publications is "Art, Technology, and Satire: The Legacy of Rube Goldberg," which appeared in the journal *Leonardo*. Goldberg's famous phrase, "No matter how thin you slice it, it's still baloney," may have resonated with Peter's keen observations on culture and art.

Under his direction, annual attendance in Houston grew exponentially from 300,000 to 1.6 million. Multiple new departments were established. A supportive board and carefully chosen department directors enhanced the vision. Exciting exhibitions as distinct as "Treasures from the Shanghai Museum," "Jewels of the Romanovs," "French Masterworks" from Moscow's Pushkin Museum and "Art in Ancient Nigeria" introduced Houston and Texans-at-large to laser views of little-known worlds. And throughout this time, Houston advanced Marzio's vision of a museum for all.

Personally, Peter was reserved, but his reach was wide. His energy was palpable. His quiet presence packed a punch. One wanted to rise to the level of his aspirations.

Peter's wife Frances, a respected art scholar in her own right, was the perfect partner for a person of Peter's breadth. She curated many of the museum's peerless exhibitions and today is the curator of the Glassell Collections and Antiquities.

Peter put a very personal stamp on the museum's activities with One Great Night in November—a celebratory evening and a resounding success.

Peter motivated and inspired! He was for all people and all seasons.

His death was mourned by Houston and an art world that recognized it had lost a visionary leader who saw art as a needed and vitally important element in any culture, perhaps especially ours.

His legacy inspires us to think about the role of the arts and its power to enrich and deepen the still young culture of this country.

On a personal note, I recall vividly sailing with Peter and Frances in the Caribbean. After lunch at anchor, Peter mentioned that he might take a dip and promptly dove in. The beach was a mile away, but his powerful stroke made short work of the distance despite the choppy water. On arrival, he stood on the bank and waved.

Peter Cort Marzio—Farewell to a valued friend.

C.B.

EVELYN G. STEHLING
1961–2010

Evelyn Stehling, a treasured friend of the Philosophical Society of Texas, died suddenly and unexpectedly at the age of 49 on June 23, 2010. In her long time capacity as Executive Assistant at the Texas State Historical Association, she managed the affairs of the Philosophical Society and coordinated its annual meetings, for which she received the great admiration and appreciation of all of its members.

Evelyn was first employed as membership secretary of the TSHA in 1983 and was later promoted to the position of Executive Assistant with the retirement of her friend, Colleen Kain. At that time she assumed the duties of managing the annual meetings of the PSOT and much of its business activities with great efficiency and the highest professional standards. Officers and members of both organizations relied on her dedication and her determination to achieve excellence in every undertaking.

She was born on March 11, 1961 in Fredericksburg, Texas, the daughter of Roman and Verena Jenschke Stehling, and soon began to exhibit her considerable athletic abilities in track, cycling, and boxing. She graduated with honors from high school in Harper, Texas, and received her B. A. with honors in History from Angelo State University in 1983. She was employed that year at the Texas State Historical Association, where she demonstrated great organizational skills in many of its statewide educational programs, including Texas History Day, the TSHA annual meeting, and the affairs of the Philosophical Society.

She later accepted management positions at The University of Texas at Austin's Department of Information Technology Services and at the Texas Education Agency. Always a model of good health and athleticism, she died while practicing for a 100 mile bicycle ride with fellow members of the Austin Flyers Women's Cycling Club.

Evelyn was regarded as a person of great honor, integrity, intelligence, and an acute loyalty to colleagues, family, and friends. They will always remember her with a strong sense of warmth, devotion, and love.

J.C.M.

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PAST PRESIDENTS

* Mirabeau Buonaparte Lamar	1837-59
* Ira Kendrick Stephens	1936
* Charles Shirley Potts	1937
* Edgar Odell Lovett	1938
* George Bannerman Dealey	1939
* George Waverley Briggs	1940
* William James	1941
* George Alfred Hill Jr.	1942
* Edward Henry Cary	1943
* Edward Randall	1944
* Umphrey Lee	1944
* Eugene Perry Locke	1945
* Louis Herman Hubbard	1946
* Pat Ireland Nixon	1947
* Ima Hogg	1948
* Albert Perley Brogan	1949
* William Lockhart Clayton	1950
* A. Frank Smith	1951
* Ernest Lynn Kurth	1952
* Dudley Kezer Woodward Jr.	1953
* Burke Baker	1954
* Jesse Andrews	1955
* James Pinckney Hart	1956
* Robert Gerald Storey	1957
* Lewis Randolph Bryan Jr.	1958
* W. St. John Garwood	1959
* George Crews McGhee	1960
* Harry Hunt Ransom	1961
* Eugene Benjamin Germany	1962
* Rupert Norval Richardson	1963
* Mrs. George Alfred Hill Jr.	1964
* Edward Randall Jr.	1965
* McGruder Ellis Sadler	1966
* William Alexander Kirkland	1967

* Deceased

* Richard Tudor Fleming	1968
* Herbert Pickens Gambrell	1969
* Harris Leon Kempner	1970
* Carey Croneis	1971
* Willis McDonald Tate	1972
* Dillon Anderson	1973
* Logan Wilson	1974
* Edward Clark	1975
* Thomas Hart Law	1976
* Truman G. Blocker Jr.	1977
* Frank E. Vandiver	1978
* Price Daniel	1979
* Durwood Fleming	1980
Charles A. LeMaistre	1981
* Abner V. McCall	1982
* Leon Jaworski	1983
Wayne H. Holtzman	1983
* Jenkins Garrett	1984
Joe R. Greenhill	1985
William Pettus Hobby	1986
* Elspeth Rostow	1987
John Clifton Caldwell	1988
J. Chrys Dougherty	1989
* Frank McReynolds Wozencraft	1990
William C. Levin	1991
* William D. Seybold	1992
Robert Krueger	1993
Steven Weinberg	1994
* William H. Crook	1995
* Charles C. Sprague	1996
Jack S. Blanton	1997
William P. Wright Jr.	1998
Patricia Hayes	1999
A. Baker Duncan	2000
Ellen C. Temple	2001
George C. Wright	2002
J. Sam Moore Jr.	2003
Alfred H. Hurley	2004
Harris L. Kempner Jr.	2005
S. Roger Horchow	2006
Isabel B. Wilson	2007
Boone Powell	2008
Michael L Gillette	2009
J. Mark McLaughlin	2010

* Deceased

MEETINGS

of The Philosophical Society of Texas

- | | | |
|--|------------------------------|----------------------|
| 1837—Founded at
Houston, December 5 | 1954—Austin | 1983—Fort Worth |
| 1840—Austin, January
29 | 1955—Nacogdoches | 1984—Houston |
| 1936—Chartered,
January 18 | 1956—Austin | 1985—College Station |
| 1936—Reorganizational
meeting—Dallas,
December 5 | 1957—Dallas | 1986—Austin |
| 1937—Meeting and
inaugural banquet—
Dallas, January 29 | 1958—Austin | 1987—Kerrville |
| 1937—Liendo and
Houston, December 4 | 1959—San Antonio | 1988—Dallas |
| 1938—Dallas | 1960—Fort Clark | 1989—San Antonio |
| 1939—Dallas | 1961—Salado | 1990—Houston |
| 1940—San Antonio | 1962—Salado | 1991—Galveston |
| 1941—Austin | 1963—Nacogdoches | 1992—Dallas |
| 1942—Dallas | 1964—Austin | 1993—Laredo |
| 1943—Dallas | 1965—Salado | 1994—Austin |
| 1944—Dallas | 1966—Salado | 1995—Corpus Christi |
| 1945—Dallas | 1967—Arlington | 1996—Dallas |
| 1946—Dallas | 1968—San Antonio | 1997—Houston |
| 1947—San Antonio | 1969—Salado | 1998—Abilene |
| 1948—Houston | 1970—Salado | 1999—Austin |
| 1949—Austin | 1971—Nacogdoches | 2000—San Antonio |
| 1950—Houston | 1972—Dallas | 2001—Austin |
| 1951—Lufkin | 1973—Austin (Lakeway
Inn) | 2002—Fort Worth |
| 1952—College Station | 1974—Austin | 2003—El Paso |
| 1953—Dallas | 1975—Fort Worth | 2004—Denton |
| | 1976—San Antonio | 2005—Galveston |
| | 1977—Galveston | 2006—Dallas |
| | 1978—Houston | 2007—Houston |
| | 1979—Austin | 2008—San Antonio |
| | 1980—San Antonio | 2009—Austin |
| | 1981—Dallas | 2010—San Angelo |
| | 1982—Galveston | |

PREAMBLE

We the undersigned form ourselves into a society for the collection and diffusion of knowledge—subscribing fully to the opinion of Lord Chancellor Bacon, that “knowledge is power”; we need not here dilate on its importance. The field of our researches is as boundless in its extent and as various in its character as the subjects of knowledge are numberless and diversified. But our object more especially at the present time is to concentrate the efforts of the enlightened and patriotic citizens of Texas, of our distinguished military commanders and travelers,—of our scholars and men of science, of our learned members of the different professions, in the collection and diffusion of correct information regarding the moral and social condition of our country; its finances, statistics and political and military history; its climate, soil and productions; the animals which roam over our broad prairies or swim in our noble streams; the customs, language and history of the aboriginal tribes who hunt or plunder on our borders; the natural curiosities of the country; our mines of untold wealth, and the thousand other topics of interest which our new and rising republic unfolds to the philosopher, the scholar and the man of the world. Texas having fought the battles of liberty, and triumphantly achieved a separate political existence, now thrown upon her internal resources for the permanence of her institutions, moral and political, calls upon all persons to use all their efforts for the increase and diffusion of useful knowledge and sound information; to take measures that she be rightly appreciated abroad, and acquire promptly and fully sustain the high standing to which she is destined among the civilized nations of the world. She calls on her intelligent and patriotic citizens to furnish to the rising generation the means of instruction within our own borders, where our children—to whose charge after all the vestal flame of Texian liberty must be committed—may be indoctrinated in sound principles and imbibe with their education respect for their country’s laws, love of her soil and veneration for her institutions. We have endeavored to respond to this call by the formation of this society, with the hope that if not to us, to our sons and successors it may be given to make the star, the single star of the West, as resplendent for all the acts that adorn civilized life as it is now glorious in military renown. Texas has her captains, let her have her wise men.

MEMBERS OF THE SOCIETY

FOR THE YEAR 2010
(NAME OF SPOUSE APPEARS IN PARENTHESES)

ABOUSSIE, MARILYN (JOHN HAY), chief justice retired, Texas Third Court of Appeals, *Austin and San Angelo*

ADAMS, PHIL, board of regents, Texas A&M University; director, American Momentum Bank; Texas Public Policy Foundation Board, *Bryan*

AGATHER, NEILS (ELAINE), executive director, Burnett Foundation; *Fort Worth*

ALLBRITTON, JOE LEWIS (BARBARA), lawyer; investor; chairman Perpetual Corporation, *Houston*

ALLISON, SHARON WILSON (SAM), former president of board of International Planned Parenthood Federation/Western Hemisphere Region, member of Governing Council of International Planned Parenthood Federation. Serves on boards of Guttmacher Institute, Americans for UNFPA, board of visitors for Johns Hopkins School of Public Health and Pathfinder International. Serves on the College of Liberal Arts Advisory Council at The University of Texas at Austin, *Waco*

ARNOLD, DANIEL C. (BEVERLY), private investor, *Houston*

ASHBY, LYNNE COX (DOROTHY), former editor, editorial page, Houston Post; member, Houston Philosophical Society; author; columnist; *Houston*

ATLAS, MORRIS (RITA), lawyer; senior partner, Atlas and Hall, *McAllen*

BABCOCK, CHARLES L. (NANCY HAMILTON), partner, Jackson, Walker, LLP; general counsel, Texas Association of Broadcasters; Chairman, Texas Supreme Court Advisory Board Committee; *Houston*

BARNES, SUSAN J., The Reverend, rector, St. John's Episcopal Church; *Minneapolis, MN*

BARNETT, LYNN (RANDY), director, Abilene Cultural Affairs Council, *Abilene*

BARNHILL, JOHN W. (JANE), former executive vice president and general sales manager and current board member, Blue Bell Creameries: chairman, Bank

of Brenham: former member, The University of Texas System Board of Regents; past president, Texas Exes; past chair, The University of Texas System Chancellor's Council Executive Committee; *Brenham*

BARROW, THOMAS D. (JANICE), retired president, T-Bar-X, Ltd.,
Houston

BARTLETT, RICHARD C. (JOANNE), vice chairman, Mary Kay Inc.; chairman, National Environmental Education & Training Foundation; member of board, National Council for Science & the Environment, NatureServe, The Nature Conservancy; member, Governor's Environmental Flows Advisory Committee, *Carrollton*

BASH, FRANK (SUSAN), retired director, McDonald Observatory, The University of Texas at Austin, *Austin*

BASS, JAMES (HONG), President, Ojai Goliad, LLC; Board Member of The Trinity Trust, St. Mark's School of Texas, The Hockaday School, *Dallas*

BASS, RICHARD "DICK" D. (ALICE), Co-authored "Seven Summits;" first person to climb highest mountain on each continent; former director, American Himalayan Foundation; member, Bohemian Club, American Alpine Club; Lifetime Achievement Award, National Ski Areas Association; developer-operator, Snowbird Ski & Summer Resort; *Dallas*

BEAUMONT, PENNY (ROGER), retired associate director, formerly Texas Transportation Institute, Texas A&M System; president, Foundation for Women's Resources, *Bryan*

BELL, PAUL GERVAIS (SUE), retired general contractor, *Houston*

BIGGS, EDWARD GLENN (ANN), former chairman Baylor University Board of Regents and First National Bank, former director Valero Energy Central & Southwest Corp., Kansas Gas & Electric, and Bolivian Power; *San Antonio*

BLANTON, JACK S., JR. (LESLIE), chairman, Nicklos Drilling Company; former chairman & CEO ADCOR-Nicklos Drilling Company; Chairman & CEO JEM Group, *Houston*

BLANTON, JACK S., SR. (GINGER), former chairman, current board member, Houston Endowment Inc., *Houston*

BOBBITT, PHILIP C., professor of law, The University of Texas at Austin; author, *Austin*

BOLES, JOHN B. (NANCY), William Pettus Hobby Professor of History at Rice University, managing editor of the *Journal of Southern History*, *Houston*

BRANCH, DANIEL H. (STACEY), member, Texas House of Representatives; *Dallas*

- BRINKERHOFF, ANN, Founding Trustee, Children's Museum of Houston, St. Francis Episcopal Day School, and Texas Division National Museum of Women in the Arts; Washington D.C. Chair, Malacology Committee, Houston Museum of Natural Science; Emeritus board, Institute of Texan Cultures; *Houston*
- BROWN, MICHAEL S. (ALICE), professor of molecular genetics and director, Jonsson Center for Molecular Genetics, the University of Texas Southwestern Medical Center at Dallas; 1985 Nobel laureate in physiology or medicine, *Dallas*
- BROWNELL, BLAINE A. (MARDI), former provost, University of North Texas; former president, Ball State University; higher education consultant and author, *Charlottesville, VA*
- BRYAN, J. P. (MARY JON), CEO, Torch Energy Advisors Inc.; former president, Texas State Historical Association, *Houston*
- BURKA, PAUL J. (SARAH), senior executive editor of *Texas Monthly*, co-creator of biennial Best and Worst Legislators feature; former attorney with the Texas Legislature, *Austin*
- BURNS, FRED C. (PAT), retired chairman, John L. Wortham & Son; president, Wortham Foundation, Inc.; board of directors, JP Morgan Chase Bank of Texas, *Houston*
- BURTON, W. AMON JR. (CAROL), attorney; adjunct professor, The University of Texas School of Law; National Conference of Bar Examiners' Multistate Professional Responsibility Examination, *Austin*
- BUSH, GEORGE W. (LAURA), former president of the United States of America, *Dallas*
- BUSH, LAURA WELCH (GEORGE), former first lady of the United States of America, founder of the Texas Book Festival, *Dallas*
- BUTT, CHARLES, chairman of the board and chief executive officer, H. E. Butt Grocery Company, *San Antonio*
- CALDER, J. KENT (TARA CARLISLE), executive director, Texas State Historical Association; *Denton*
- CALDWELL, JOHN CLIFTON (SHIRLEY), rancher; former chairman, Texas Historical Commission; former president, Texas State Historical Association, *Albany*
- CALGAARD, RONALD KEITH (GENIE), Chairman and trustee, Ray Ellison Grandchildren Trust; president emeritus, Trinity University, *San Antonio*
- CALHOUN, KIRK A. (JEANETTE), president, University of Texas Health Science Center at Tyler; *Tyler*

- CAMPBELL, BONNIE A., director, Bayou Bend Collection and Gardens, Houston Museum of Fine Arts; former executive officer, Bob Bullock Texas State History Museum; former curator, Texas State Capitol, founding board member, Center for the Advancement and Study of Early Texas Art; *Houston*
- CAMPBELL, RANDOLPH "MIKE" B. (DIANA SNOW), Regents Professor of History, University of North Texas, *Denton*
- CANTRELL, GREGG, professor of history, Texas Christian University, *Fort Worth*
- CAPPER, JOYCE PATE (ROBERT), founder, Abraham Lincoln Appreciation Society; honorary consular, Grand Duchy of Luxembourg; organized first Edna Gladney Auxiliary in 1965; opened Pate Museum of Transportation in Cresson, Texas, *Fort Worth*
- CAPPER, ROBERT S. (JOYCE), president, Fort Worth Chapter of the American Heart Association; vice chairman, Harris Methodist Health Foundation, *Fort Worth*
- CARLETON, DON E. (SUZANNE), executive director, Dolph Briscoe Center for American History, The University of Texas at Austin, *Austin*
- CARLSON, PAUL H. (ELLEN), retired history professor, Texas Tech University; former Director, Texas Tech Center for the Southwest; author *The Plains Indians*, *Pecos Bill: A Military Biography of William R. Shaffer*, and *Empire Builder in the Texas Panhandle: William Henry Bush; Ransom Canyon*
- CARSON, RONALD (UTE), Independent Scholar and Adjunct Professor in the Plan II Honors Program, The University of Texas at Austin, *Austin*
- CATTO, HENRY E., former U.S. ambassador to Great Britain and El Salvador; vice-chairman, Aspen Institute; former vice-chairman, National Public Radio; former director, U.S. Information Agency, *San Antonio*
- CAVAZOS, LAURO F. (PEGGY ANN), former U.S. secretary of education; former president, Texas Tech University and Texas Tech University Health Sciences Center, *Port Aransas*
- CHEW, DAVID WELLINGTON (MANDY), Chief Justice, Eighth Court of Appeals, 2006 to present; 8th Court of Appeals Justice, 1996–2007; past representative, City Council of El Paso; practicing attorney specializing in immigration and nationality law; former Lieutenant Commander, United States Navy; *El Paso*
- CIGARROA, FRANCISCO (GRACIELA), chancellor, The University of Texas System; pediatric and transplant surgeon, *Austin*

- CIGARROA, JOAQUIN G., JR. (BARBARA), physician, internal medicine and cardiology, *Laredo*
- CLEMENTS, WILLIAM P., JR. (RITA), former governor of Texas; former chairman, SEDCO, Inc.; former U.S. deputy secretary of defense, *Dallas*
- COERS, DONALD, Provost, Vice President, Academic Affairs, Angelo State University; award winning author and international expert on the works of John Steinbeck; state president, Texas Council of Faculty Senates, *San Angelo*
- CORMIER, RUFUS (YVONNE), attorney and partner in the Houston office of Baker Botts L.L.P., *Houston*
- CORNYN, JOHN (SANDY), US Senator, Texas; *San Antonio and Washington, D.C.*
- COX, PATRICK (BRENDA), assistant director, Dolph Briscoe Center for American History, The University of Texas at Austin; historian; writer, *Austin*
- CRAIN, JOHN WALKER (MIMI), president of Summerlee Foundation; honorary director, Texas State Historical Association, *Dallas*
- CRAVEN, JUDITH LYNN BERWICK (MORITZ), past president, United Way of the Texas Gulf Coast; regent, The University of Texas System, *Houston*
- CRIM, WILLIAM ROBERT (MARGARET), investments, *Kilgore*
- CRISP, JAMES E., (LYNN), associate professor of history, North Carolina State University; author, *Sleuthing the Alamo: Davy Crockett's Last Stand and Other Mysteries of the Texas Revolution; Raleigh, NC*
- CROOK, ELIZABETH (MARC LEWIS), author; member, Texas Institute of Letters, *Austin*
- CRUTCHER, RONALD A. (BETTY), president, Wheaton College; cellist; *Norton, MA*
- CRUZ, R. TED (HEIDI), Candidate for Attorney General of Texas; Partner, Morgan, Lewis & Bockius LLP; Adjunct Professor of Law, The University of Texas School of Law; *Austin*
- CULLUM, LEE, journalist contributing columns to *Dallas Morning News* and commentaries to National Public Radio's *All Things Considered* and to *News Hour with Jim Lehrer*; author of *Genius Came Early: Creativity in the Twentieth Century*, *Dallas*
- CUMMINS, LIGHT T. (VICTORIA), Texas State Historian; Guy M. Bryan Professor of History, Austin College; Fellow, Texas State Historical Association; *Sherman*

- CUNNINGHAM, WILLIAM H. (ISABELLA), former president, The University of Texas at Austin; former chancellor, The University of Texas System, *Austin*
- CURTIS, GREGORY (TRACY), editor, *Texas Monthly*, 1981–2000; author, *Austin*
- DAILEY, MACEO (SONDRA), director of African American Studies and assistant professor of history at The University of Texas at El Paso; board chair of Humanities Texas, *El Paso*
- DANIEL, DAVID E. (SUSAN), president, The University of Dallas; member, National Academy of Engineering; board member and past president, The Academy of Medicine, Engineering, and Science of Texas; *Dallas*
- DAVIS, D. JACK (GAIL), professor of Art, University of North Texas; director, North Texas Institute for Educators on the Visual Arts, *Denton*
- DAVIS, RAMONA, executive director, Greater Houston Preservation Alliance, *Houston*
- DE LA TEJA, JESÚS F. (MAGDALENA), Appointed first Texas State Historian 2007 by the Governor of Texas; Department of History Chair, Texas State University; Board of Directors, Texas State Historical Association; *Austin*
- DE WETTER, MARGARET B., Author of three volumes of poetry, two biographies, and three books of genealogy; winner of the Daughters of the Republic of Texas' Mamie Wynne Cox award; member, Huntington Library Live Poets Society; University of Texas El Paso Distinguished Alumna; El Paso Women's Hall of Fame; *El Paso*
- DEAN, DAVID A. (JEAN), lawyer; former secretary of state, Texas, *Dallas*
- DECHERD, ROBERT W. (MAUREEN), Chairman of the Board, President, and Chief Executive Officer A. H. Belo Corporation; *Dallas*
- DELCO, WILHELMINA (EXALTON), former member, Texas House of Representatives; civic leader; adjunct professor, Community College Leadership Program, The University of Texas at Austin; and chair, Board of Trustees, Huston-Tillotson College, *Austin*
- DENIUS, FRANKLIN W. (CHARMAINE), lawyer; former president, The University of Texas Ex-Students' Association; member, Constitutional Revision Committee; Distinguished Alumnus, The University of Texas at Austin; decorated veteran of World War II, *Austin*
- DENTON, P. LYNN (MARK), founding Director of the Bob Bullock Texas State History Museum; Past-President, Texas Association of Museums; *Dripping Springs*
- DEWHURST, DAVID, lieutenant governor of Texas, veteran, businessman, rancher, *Austin*

- DICK, JAMES, founder-director, International Festival-Institute at Round Top; concert pianist and teacher, *Round Top*
- DIEHL, RANDY L. (MARY), dean, College of Liberal Arts, The University of Texas at Austin; *Austin*
- DJEREJIAN, EDWARD P. (FRANCOISE HAELTERS), Founding and present Director of the James Al Baker III Institute for Public Policy at Rice University, former U.S. Ambassador to Israel and former U.S. Ambassador to the Syrian Arab Republic, *Houston*
- DOBIE, DUDLEY R., JR. (SAZA), successor trustee, Clayton Foundation of Research; shareholder, Brorby & Crozier, P. C., *Austin*
- DOUGHERTY, J. CHRYS, III, retired attorney; former Honorary French Consul in Austin; former president, State Bar of Texas; former trustee, St. Stephen's Episcopal School, Austin; former trustee, The University of Texas Law School Foundation; trustee, Texas Supreme Court Historical Society, The Austin Project; Administrative vice-chair, Texas Appleseed, *Austin*
- DOUGHERTY, J. CHRYS, IV (MARY ANN), Senior research scientist, National Center for Educational Achievement & ACT, Inc., *Austin*
- DUGGER, RONNIE E. (PATRICIA BLAKE), reporter, writer, and social structure activist, *Austin and Cambridge, MA*
- DUNCAN, A. BAKER (SALLY), chairman, Duncan-Smith Investments Inc., *San Antonio*
- DUNCAN, CHARLES WILLIAM, JR. (ANNE), chairman, Duncan Interests; former secretary, U.S. Energy Department; deputy secretary, U.S. Defense Department; president, The Coca-Cola Company; chairman, Rotan Mosle Financial Corporation, *Houston*
- DUNCAN, JOHN HOUSE (BRENDA), businessman; chairman, board of trustees, Southwestern University, *Houston*
- EARVIN, LARRY L., president, Huston-Tillotson College; former dean, School of Arts and Sciences, Clark Atlanta University, *Austin*
- EMANUEL, VICTOR LLOYD, naturalist and founder of Victor Emanuel Nature Tours, *Austin*
- FARABEE, KENNETH RAY (MARY MARGARET), former vice-chancellor and general counsel, The University of Texas System; former member, Texas Senate, *Austin*
- FAULKNER, LARRY R. (MARY ANN), president emeritus, The University of Texas at Austin, *Houston*
- FEHRENBACH, T. R. (LILLIAN), author; historian; former chairman, commis-

sioner emeritus, Texas Historical Commission; former chairman, Texas Antiquities Committee; fellow, Texas State Historical Association, *San Antonio*

FISHER, RICHARD (NANCY), recipient of Service to Democracy Award & Dwight D. Eisenhower Medal for Public Service from the American Assembly; president & CEO, Federal Reserve Bank of Dallas; member, Federal Open Market Committee; former vice chairman, Kissinger McLarty Associates; former deputy, U.S. trade representative; Laureate, Dallas Junior Achievement Business Hall of Fame, *Dallas*

FLATO, EDWARD C. (KATY), architect, Lake/Flato, *San Antonio*

FLAWN, PETER T. (PRISCILLA), president emeritus, The University of Texas at Austin, *Austin*

FLEMING, CHERYL (JON), operatic soprano, director & producer; former Dean of Margaret Petree School of Performing Arts in Oklahoma City; former Managing Director of the Tulsa Opera; advisor-consultant of the Metropolitan Opera, National Endowment for the Arts, and the National Endowment for the Humanities; award winning poet, writer on Arts education, children's books author, *North Zulch*

FLEMING, JON HUGH (CHERYL), educator; consultant; businessman; former president, Texas Wesleyan College; former member, Governor's Select Committee on Public Education, *North Zulch*

FLORES, DIONICIO, Texas State University Board of regents; executive vice president and editor, *El Paso Times*, *El Paso*

FLOWERS, BETTY SUE, former director, Lyndon Baines Johnson Presidential Library, *Austin*

FRANCIS, JAMES B. JR. (DEBBIE), president, Francis Enterprises, Inc; board of directors, Silverleaf Resorts, Inc; trustee, Southwest Research Institute, *Dallas*

FRANCIS, L. FREDERICK "RICK" (GINGER), Chairman, Bank of the West, El Paso, Texas; Director, Chairman of the Compensation Committee for Western Refining, Inc.; Member of the Board of Regents, Texas Tech University System; *El Paso*

FRAZIER, DONALD (SUSAN), professor of history, McMurry University; fellow and executive director, Grady McWhiney Research Foundation, *Abilene*

FROST, PAT (KELLEY), president, Frost National Bank; serves on over ten non-profit boards in San Antonio, *San Antonio*

FROST, TOM C. (PATRICIA), chairman emeritus, Frost National Bank, *San Antonio*

- FURGESON, W. ROYAL, JR. (MARCELLENE), U.S. district judge, Northern District of Texas, Dallas Division, *Dallas*
- GALBRAITH, JAMES K. (YING TANG), professor, Lyndon Baines Johnson School of Public Affairs, The University of Texas at Austin, *Austin*
- GALVAN, ISRAEL J. (MARSHA ANN PERLMAN), founder and president of GHG Corp., *League City*
- GALVIN, CHARLES O'NEILL (MARGARET), centennial professor of law, emeritus, Vanderbilt University, Nashville; of counsel, Haynes and Boone, L.L.P., Dallas; distinguished professor of law emeritus, Southern Methodist University, *Dallas*
- GARCIA, JULIET VILLARREAL (OSCAR E.), president of The University of Texas at Brownsville and Texas Southmost College, *Brownsville*
- GARNER, BRYAN ANDREW (KAROLYNE), author; lecturer; lawyer; president, LawProse, *Dallas*
- GARWOOD, WILLIAM L. (MERLE), judge, U.S. Court of Appeals, Fifth Circuit, *Austin*
- GEORGE, ROGER JAMES, JR. (CHERYL), trial lawyer, founding partner of George & Donaldson, LLP, *Austin*
- GILLETTE, MICHAEL L. (LEANN), director, Humanities Texas; retired, National Archives, *Austin*
- GILLIS, MALCOLM (ELIZABETH), president, Rice University, *Houston*
- GLICKMAN, JULIUS (SUZAN), past chair, Chancellor's Council, The University of Texas System; past chair, Development Board, The University of Texas; board of directors, Jack S. Blanton Museum of Art; chair, Texas Humanities Council; Advisory Board of Directors, UT Health Science Center; Recipient of pro Bene Meritus, College of Liberal Arts Univ. of Texas; Liberal Arts Council, Univ. of Texas; Recipient of Leon Jaworski Award for Public Service from the Houston Bar Auxiliary; Past Chairman of the Board and President, Houston Public Television; Past Director, Executive Committee, Houston Symphony; Past Director, Greater Houston YMCA; *Houston*
- GOLDSTEIN, JOSEPH L., professor of medicine and molecular genetics, The University of Texas Southwest Medical Center; Nobel laureate in medicine or physiology, *Dallas*
- GRANOF, MICHAEL H. (DENA HIRSCH), professor of Accounting, McCombs School of Business and LBJ School of Public Affairs, The University of Texas at Austin; specialist in government accounting; member of several committees involved in setting accounting and auditing standards for both state and local governments and federal government, *Austin*

GRANT, JOSEPH M., chairman emeritus, Texas Capital Bancshares, Inc., *Dallas*

GREENHILL, JOE R. (MARTHA), lawyer; former chief justice, Supreme Court of Texas, *Austin*

GRUBEN, WILLIAM C. (MARILU), Radcliffe Killam Professor of Economics, Texas A&M International University; Research assistant, Globalization and Monetary Policy Institute, Federal Reserve Bank of Dallas; Board of Advisors, University of Texas at Austin Lozano Long Institute for Latin American Studies; *Laredo and Dallas*

GUERRA, FERNANDO A. (BEVERLY), director of San Antonio Metropolitan Health District, Clinical Professor of Pediatrics at University of Texas Health Science Center-San Antonio, member of Institute of Medicine of the National Academy of Sciences, member of Commonwealth Fund, National Commission for a High Performing Public Health System, recipient of Ashbel Smith Distinguished Alumnus Award from The University of Texas Medical Branch, recipient of Bronze Star Medal, U.S. Army Commendation Medal, *San Antonio*

GUEST, WILLIAM F., attorney; chairman, American Capitol Insurance Company, *Houston*

GULETT, JOHN, physician, *Provincetown, MA*

GUNTER, PETE A.Y. (ELIZABETH), Regents Professor of Philosophy, University of North Texas; member, Texas Institute of Letters; board of directors, *Southwest Philosophy Review*; president, Association for Process Philosophy of Education; lifetime board member and past president, Big Thicket Association, *Denton*

GUTHRIE, JUDITH K. (MATTHEW WATSON), United States Magistrate Judge, U.S. District Court, Eastern District of Texas; *Tyler*

HAMILTON, ANN THOMAS, senior grant officer, Houston Endowment Inc.; vice-president, Jacob W. & Terese Hershey Foundation, *Houston*

HARDESTY, ROBERT L. (MARY), former president, Southwest Texas State University; former assistant to the president of the United States; former chairman, board of governors, United States Postal Service; former vice-chancellor, The University of Texas System, *Austin*

HARRIGAN, STEPHEN MICHAEL (SUE ELLEN), author; contributing editor, *Texas Monthly*, *Austin*

HARTE, CHRISTOPHER M. (KATHERINE STODDARD POPE), investments, *Portland, ME*

HARTE, EDWARD HOLMEAD, former publisher, Corpus Christi *Caller-Times*, *Corpus Christi*

HAY, JESS, Retired Chairman and CEO, Lomas Financial Group; chairman, Texas Foundation for Higher Education; former member, board of regents, University of Texas System, *Dallas*

HAYES, PATRICIA A., retired CEO, Seton Healthcare Network, *Austin*

HECHT, NATHAN LINCOLN, justice, Supreme Court of Texas, *Austin*

HERSHERY, TERESE TARLTON "TERRY," civic leader; former Houston Parks Board; National Association of Flood Plain Managers Foundation; National Recreation Foundation; Texas Women's Hall of Fame; former board member, National Audubon Society; Trust for Public Lands; Texas Parks and Wildlife Commission; National Recreation & Park Association; founder, fellow, advisory board member, Lady Bird Johnson Wildflower Center; Frances K. Hutchison Medal for distinguished service to conservation, Garden Club of America; *Houston*

HEYER, GEORGE STUART, JR., professor emeritus, history of doctrine, Austin Presbyterian Theological Seminary, *Austin*

HIGGINBOTHAM, PATRICK E. (ELIZABETH), judge, U.S. Court of Appeals, Fifth Circuit, *Dallas*

HILGERS, WILLIAM B., attorney; former chairman, Supreme Court of Texas Grievance Oversight Committee, *Del Valle*

HILL, LYDA, president, LH Holdings and Seven Falls Company, *Dallas*

HINES, GERALD DOUGLAS (BARBARA), chairman, Hines Interests, *Houston*

HIXON, SARITA A. (ROBERT), Board of Directors, Texas State Historical Association, appointed to Texas Historical Commission 2005, past chair of San Jacinto Museum of History; elected Kenedy County Commissioner, Precinct 3 2008, *Houston*

HO, JAMES C. (ALLYSON), Solicitor General of Texas; Of Counsel, Gibson, Dunn, & Crutcher, LLP, Dallas; Law Clerk, U.S. Supreme Court Justice Clarence Thomas; Chief Counsel, U.S. Senator John Cornyn, *Dallas*

HOBBY, DIANA (WILLIAM), *Houston*

HOBBY, WILLIAM PETTUS (DIANA), lieutenant governor of Texas, 1973–1991; Radoslav A. Tsanoff Professor, Rice University, 1989–present; Sid Richardson Professor, Lyndon Baines Johnson School of Public Affairs, The University of Texas at Austin, 1991–1997; chancellor, University of Houston System, *Houston*

HOLTZMAN, WAYNE H. (JOAN), professor emeritus of psychology and education; past president, Hogg Foundation for Mental Health, University of Texas at Austin, *Austin*

HOOK, HAROLD SWANSON (JOANNE), retired chairman and chief executive, American General Corporation; trustee, Baylor College of Medicine; former national president of the Boy Scouts of America; Texas Business Hall of Fame, *Houston*

HORCHOW, S. ROGER (CAROLYN), founder and former CEO of the Horchow Collection, author, theatrical producer, *Dallas*

HOWE, JOHN P., III, physician; president and CEO, Project Hope, *Washington, D.C.*

HUDSON, EDWARD R. JR. (ANN FRASHER), independent oil producer; board member, Kimbell Art Foundation, Burnett Foundation, Modern Art Museum of Fort Worth, Aspen Art Museum, and Aspen Center for Physics, Friends of Art and Preservation in Embassies, *Fort Worth*

HUEY, MARY EVELYN (GRIFFIN), president emerita, Texas Woman's University, *Denton*

HUFFINES, JAMES R. (PATTY), former chairman of the Board of Regents of the University of Texas System and current vice chairman of the Board of Regents; Chairman, Central & South Texas for Plains Capital Bank, *Austin*

HUGHES, VESTER T., JR., lawyer; partner, K&L Gates, *Dallas*

HUNT, WOODY L. (GAYLE), chairman and CEO, Hunt Building Corporation; member, The University of Texas System Board of Regents; member of numerous local and state business and charitable boards, *El Paso*

HURLEY, ALFRED FRANCIS (JOANNA), professor of history, University of North Texas, chancellor/president emeritus, University of North Texas; chancellor emeritus, University of North Texas System, Brigadier General USAF (retired), *Dallas*

HUTCHISON, KAY BAILEY (RAY), U.S. senator; former state treasurer, Texas, *Dallas and Washington, D.C.*

INMAN, BOBBY R. (NANCY), admiral, U.S. Navy (retired); investor, *Austin*

JACK, JANIS GRAHAM (WILLIAM DAVID), U.S. district judge, *Corpus Christi*

JACKSON, LEE, chancellor, University of North Texas System; former member, Texas House of Representatives; four-time Dallas County Judge, *Dallas*

JACOBS, GARY, (JESSIE), chairman, Cabo Capital, Advisors, Ltd., *Laredo*

JAMAIL, JOSEPH D. JR., attorney; philanthropist, *Houston*

JOHNSON, CLAY III (ANNE), Former Deputy Director, Management, Office of Management and Budget, *Washington D.C.*

- JOHNSON, LUCI BAINES (IAN TURPIN), chair, LBJ Asset Management Partners, *Austin*
- JORDAN, BRYCE (BARBARA), president emeritus, Pennsylvania State University, *Austin*
- ** KAIN, COLLEEN T., retired executive assistant, The University of Texas at Austin, *Austin*
- KECK, RAY M. (PATRICIA), president, Texas A&M International University, former provost & vice-president for Academic Affairs, *Laredo*
- KELLEHER, HERB, cofounder and former executive chairman of Southwest Airlines, serves on Federal Reserve Bank of Dallas board. Recipient of Wright Brothers Memorial Trophy, INC magazine's U.S. Master Entrepreneur and the Bower Award for Business Leadership from the Franklin Institute, *Dallas*
- KELLY, DEE J. (JANICE), attorney, *Fort Worth*
- KELSEY, MAVIS PARROTT SR., retired physician; founder and former chief, Kelsey-Seybold Clinic, *Houston*
- KEMPNER, HARRIS L., JR. (HETTA), trustee, H. Kempner; president, Kempner Capital Management, Inc., *Galveston*
- KESSLER, JAMES LEE (SHELLEY), Rabbi, Temple B'nai Israel; founder and first president, Texas Jewish Historical Society, *Galveston*
- KING, CAROLYN DINEEN (THOMAS M. REAVLEY), circuit judge, U.S. Court of Appeals, Fifth Circuit, *Houston*
- KING, ROBERT D., professor, Linguistics, founding dean, College of Liberal Arts, The University of Texas at Austin, *Austin*
- KLEBERG, SALLY SEARCY, financial educator; family office manager, *New York and San Antonio*
- KLEBERG, SCOTT M. (JULIE MCGANGBY), principal, CA Partners LLC; *Fort Worth*
- KLEIN, MELVYN N. (ANNETTE), founder, Melvyn N. Klein Interests; attorney; adjunct professor, Texas A&M University-Corpus Christi, *Corpus Christi*
- KRIER, CYNDI TAYLOR (JOSEPH), former member, Texas Senate; partner, Vallejo Ranch, *San Antonio*
- KRUEGER, ROBERT "BOB" CHARLES (KATHLEEN), former U.S. senator, congressman, ambassador to Burundi, ambassador to Botswana, ambassador at-large to Mexico; former Texas Railroad commissioner; former vice-provost and dean of Arts and Sciences, Duke University; author; president, Krueger Associates, *New Braunfels*

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LANE, NEAL (JONI), Malcolm Gillis University professor and senior fellow, James A. Baker III Institute for Public Policy, Department of Physics and Astronomy, Rice University; former director, White House Office of Science and Technology Policy; former director National Science Foundation, *Houston*

LARIVIERE, RICHARD W. (JANIS), President, University of Oregon; *Eugene, OR*

LASATER, GARLAND M., JR. (MOLLIE), Board of Visitors, McDonald Observatory of The University of Texas; member, Aspen Center for Physics; director, Aspen Science Center, *Fort Worth*

LEE, ELIZABETH MAXWELL (WILLIAM), head of school, Columbus School for Girls, Columbus, Ohio; former executive director, Foundation for the Education of Young Women; founder, Irma Rangel Leadership School for Young Women, *Dallas*

LEEBRON, DAVID W. (Y. PING SUN), president, Rice University, former dean Columbia University School of Law, *Houston*

LEMAISTRE, CHARLES A. (ANDREA), president emeritus, The University of Texas Cancer Center, M. D. Anderson; former chancellor, The University of Texas System; *San Antonio*

LEVIN, WILLIAM C., physician; president emeritus and Ashbel Smith Professor, University of Texas Medical Branch at Galveston, *Galveston*

LINDSEY, JOHN H. (SARA), businessman; art collector; civic leader; former member, board of directors, Museum of Fine Arts; director, Alley Theatre; member, board of regents, Texas A&M University System; former member of the board of the United States Military Academy at West Point, *Houston*

LIVINGSTON, WILLIAM S. (LANA), senior vice president, The University of Texas at Austin, *Austin*

LOCHRIDGE, LLOYD, lawyer; former president, State Bar of Texas; former member, board of governors, American Bar Association, *Austin*

LOCKE, JOHN PATRICK (RAMONA), president, Locke Holdings, Inc., *Dallas*

LORD, GROGAN (BETTY), senior chairman, First Texas Bancorp; member, Texas Securities Board; trustee, Southwestern University, *Georgetown*

LOW, GILBERT, lawyer, *Beaumont*

LOWE, RICHARD (KATHY), Regents Professor, University of North Texas; author and recipient of Jefferson Davis Award of the Museum of the

Confederacy for *Walker's Texas Division, CSA: Greyhounds of the Trans-Mississippi*, author of several books, *Denton*

LOWMAN, ALBERT T. (DARLYNE), past president, Texas Folklore Society, Book Club of Texas, Texas State Historical Association; managing partner, Lowman Ranch, Ltd., *San Marcos*

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MARCUS, NANCY CAIN, professor, Southern Methodist University, former professor at University of Dallas and American Academy in Rome. Serves on boards of Dallas Center for the Performing Arts Foundation, Trinity Trust, Dallas Committee on Foreign Relations, and Dallas Institute of Humanities and Culture. Appointed to Commission on 21st Century Colleges and Universities and to Humanities Texas Board of Directors. Received presidential appointment as a United States Public Delegate to the United Nations General Assembly in 2001, *Dallas*

MARGO, ADAIR WAKEFIELD (DONALD R. "DEE"), owner, Adair Margo Gallery; member, Texas Higher Education Coordinating Board; State Advisory Council, Texas Book Festival; chairman, President's Council on the Arts and Humanities, *El Paso*

MARK, HANS (MARION), professor of aerospace engineering, The University of Texas at Austin, *Austin*

MARSH, GWENDOLYN "WENDY" O. (STANLEY), civic volunteer active in arts and education, *Amarillo*

MARTIN, JAMES C., former associate director, Center for American History, The University of Texas at Austin; former executive director, San Jacinto Museum of History, Houston; Department of Special Collections, The University of Texas; Arlington; and the Texas State Historical Association, Austin, retired, *Austin*

MARTIN, ROBERT S. (BARBARA), former director, Institute for Museum and Library Services; former director, Texas State Library, *Dallas*

MARTINEZ, PHILIP, United States District Judge, Western District of Texas; former Judge of the 327th District Court; member American Law Institute; former director El Paso Legal Assistance Society, El Paso Holocaust Museum, El Paso Cancer Treatment Center, and Hispanic Leadership Institute, *El Paso*

- MARTINEZ, VIDAL G. (DEBORAH), partner, Franklin, Cardwell, & Jones; Chairman, Texas Public Education Reform Foundation, *Houston*
- MATTHEWS, JULIA JONES, president, Dodge Jones Foundation; *Abilene*
- MATTHEWS, KATHLEEN SHIVE, Stewart Memorial Professor, Biochemistry and Cell Biology, Wiess School of Natural Sciences, Rice University; elected to American Association for the Advancement of Science, *Houston*
- MCCOMBS, B. J. "RED" (CHARLINE), owner, McCombs Enterprises, *San Antonio*
- MCCORQUODALE, ROBIN HUNT; novelist, *Houston*
- MCCOWN, F. SCOTT (MAURA POWERS), executive director, Center for Public Policy Priorities, retired judge, 345th District Court, Travis County, Texas, named by *Texas Monthly* as one of "The 25 Most Powerful People in Texas Politics," *Austin*
- MCDERMOTT, MARGARET (EUGENE), The University of Texas at Austin Distinguished Alumna; patron of the arts, education, and medicine in various community involvements; member, International Council of Museum of Modern Art in New York and the Dallas Shakespeare Club; honorary alumnus of the Massachusetts Institute of Technology, *Dallas*
- MCFADDEN, JOSEPH M., president emeritus, professor of history, University of St. Thomas, *Houston*
- MCHUGH, M. COLLEEN, member, Board of Regents, The University of Texas System, *Corpus Christi*
- MCKNIGHT, JOSEPH WEBB (MIMI), professor, Southern Methodist School of Law; legal historian; law reformer, *Dallas*
- MCLAUGHLIN, JOHN MARK (AMY), manager, Double M Ranch, Ltd; lawyer; chairman, Texas State Bank, San Angelo, *San Angelo*
- MCNEILL, LARRY, past president, Texas State Historical Association; president, Texas Supreme Court Historical Society; president, Clark, Thomas & Winters, P.C., *Austin*
- MCREYNOLDS, JIM (JUDY), member, Texas House of Representatives; former faculty member, Stephen F. Austin State University; owner, Chaparral Energy, Inc., *Lufkin*
- MENDELSON, JOHN (ANNE), president of The University of Texas M.D. Anderson Cancer Center in Houston since 1996, board member of Greater Houston Partnership, Houston Technology Center, BioHouston and Houston Forum, *Houston*
- MIDDLETON, HARRY J. (MIRIAM), director emeritus, Lyndon B. Johnson

Presidential Library and Museum; executive director, Lyndon B. Johnson Foundation, *Austin*

MILLER, CHARLES (BETH), *Houston*

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MOORE, J. SAM, JR. (GRETA), retired lawyer; former chairman, Texas Committee for the Humanities; former member, Texas Law Review Association, *El Paso*

MOSLE, PAULA MEREDITH, life trustee, former chairman, Hockaday School; former dean of women, Rice University; former governor, current trustee advisor, Rice University; trustee, The St. Michael Foundation, *Dallas*

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NEWTON, W. FRANK (NANCY JO), president of the Beaumont Foundation of America, a national resource for education in the field of technology. Past President of the State Bar of Texas and former Dean and Professor of Law at Texas Tech Law School, *Beaumont*

NICKLAUS, HELEN CAROL (TED), The University of Texas Liberal Arts Foundation Advisory Council, recipient of the Jim Veninga Award for Excellence in Humanities, Texas Council for the Humanities, *Amarillo*

NYE, ERLE A. (ALICE), chairman emeritus, TXU Corp; former chairman, current regent, Texas A&M University System, *Dallas*

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OLSON, LYNDON L., JR. (KAY), former U.S. Ambassador to Sweden, *Waco*

OSHINSKY, DAVID M. (JANE), Jack S. Blanton Chair in History at The University of Texas at Austin; won Pulitzer Prize for History 2006 for *Polio: An American Story*; specialist in 20th century U.S. political and cultural

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O'TOOLE, THOMAS F. (JANE), managing partner, Glenhest, Ltd; Director, National Alliance for Mental Illness, *Dallas*

OXFORD, PATRICK CUNNINGHAM (KATE), Chairman, Bracewell & Giuliani LLP; board of regents, University of Texas Systems; board member, M.D. Anderson Outreach, Inc. & Texas Medical Center, *Houston*

PALAIMA, THOMAS G., professor of Classics, The University of Texas at Austin; commentary writer and book reviewer; *Austin*

PARADES, RAYMUND A., Commissioner of Higher Education, Texas Higher Education Coordinating Board; board of directors, Texas Cultural Trust; board of trustees, Mercy College, New York, *Austin*

PATTERSON, PATRICIA M., president, Patterson Investments, Inc; board of directors, Hockaday School, *Dallas*

PFEIFFER, FRED N. (ANN MARIA), professional engineer; attorney; former General Manager, San Antonio River Authority, *San Antonio*

PHILLIPS, JEANNE JOHNSON (DAVID), senior vice president, Corporate Affairs and International Relations, Hunt Consolidated, Inc., Hunt Oil Company, Inc., *Dallas*

PHILLIPS, THOMAS R. (LYN), attorney, Baker Botts, L.L.P.: former chief justice, Supreme Court of Texas; *Austin*

POPE, JACK (ALLENE), former chief justice, Supreme Court of Texas, *Austin*

PORTER-SCOTT, JENNY LIND (LAWRENCE E.), poet and educator, former poet laureate of Texas, *Austin*

POWELL, BOONE (DIANNE), president, Ford, Powell, & Carson, Architects; College of Fellows, American Institute of Architects; former president, Texas Society of Architects; peer professional, U.S. General Services Administration, *San Antonio*

POWERS, WILLIAM C. (KIM HEIBRUN), president, The University of Texas at Austin, Hines H. Baker and Thelma Kelly Baker Chair, University Distinguished Teaching Professor, *Austin*

PRADO, EDWARD C. (MARIA), U.S. Circuit Judge, U.S. Court of Appeals; former U.S. District Court Judge, Western District of Texas; former U.S. Attorney, Western District of Texas, *San Antonio*

PRESSLER, H. PAUL, III (NANCY), justice (retired), Court of Appeals of Texas, Fourteenth Supreme Judicial District, *Houston*

- PROTHRO, CAREN H. (C. VINCENT), member of board of Dallas Museum of Art, Dallas Center for the Performing Arts Foundation, and Southwestern Medical Foundation, *Dallas*
- RAMEY, TOM B., JR. (JILL), lawyer; chief justice, Twelfth Court of Appeals, *Tyler*
- RAMIREZ, MARIO E., (SARAH), physician; past member, board of regents, University of Texas System, vice-president for South Texas/Border Initiatives, University of Texas Health Science Center at San Antonio; *McAllen*
- RANDALL, EDWARD, III (ELLEN), private investor, *Houston*
- RANDALL, RISHER (FAIRFAX), former senior vice president and director, American General Investment Corporation; manager, family trusts, investments, and real estate, *Houston*
- REASONER, HARRY MAX (MACEY), lawyer; senior partner, Vinson & Elkins, *Houston*
- REAUD, WAYNE A., attorney and philanthropist; member of The University of Texas System Chancellor's Council, *Beaumont*
- REAVLEY, THOMAS M. (CAROLYN DINEEN KING), judge, U.S. Court of Appeals, Fifth Circuit, *Austin*
- RHODES, CHARLOTTE W. (ALEC), patron, Shakespeare at Winedale; chancellor's council, The University of Texas at Austin; Harry Ransom Humanities Research Center Advisory Council, The University of Texas at Austin, *Dripping Springs*
- RITTER, GRETCHEN, Vice provost and professor of government at The University of Texas at Austin. Former Director of the Center for Women and Gender Studies and former co-chair of the Gender Equity Task Force at UT Austin. Serves on Program Committee for the Foundation of the Ann Richards School and the Intercollegiate Women's Athletics Committee for Y Sports, *Austin*
- ROACH, JOYCE G., retired professor, Texas Christian University; author; folklorist; grassroots historian; rancher; naturalist; lifetime member and Fellow, Texas State Historical Association and Texas Folklore Society; member, Texas Institute of Letters; lifetime member, West Texas Historical Association; member and past president, Horned Lizard Conservation Society; honoree, National Cowgirl Hall of Fame and Museum; *Keller*
- ROBINSON, MARY LOU, U.S. district judge; former state appellate and trial judge, *Amarillo*
- RODRIGUEZ, EDUARDO R. (PAULA), attorney, Rodriguez, Colvin, Chaney & Saez, LLP; *Brownsville*

- RODRIGUEZ, RAÚL (LORENA), managing director and CEO, North American Development Bank, *San Antonio*
- ROGERS, ELIZABETH, Assistant Federal Public Defender, Western District of Texas since 1984, board of directors, State Bar of Texas 2005–2008, *Alpine*
- ROGERS, JESSE W. (KAREN), president, Midwestern State University; Commissioner, Southern Association of Colleges and Schools, *Wichita Falls*
- ROMO, RICARDO (HARRIETT), president, The University of Texas at San Antonio, *San Antonio*
- ROVE, KARL C., Fox News Contributor, Columnist for the *Wall Street Journal* and *Newsweek*, *Washington, D.C.*
- RUTFORD, ROBERT HOXIE (MARJORIE ANN), Excellence in Education Foundation Chair in Geoscience, The University of Texas at Dallas; former president, The University of Texas at Dallas; former director, Division of Polar Programs, National Science Foundation; president, Scientific Committee on Antarctic Research, *Richardson*
- SANSOM, ANDREW (NONA), executive director, River Systems Institute and Research Professor of Geography at Texas State University San Marcos; former executive director, Texas Parks & Wildlife Department; executive director, Texas Nature Conservancy; founder, The Parks and Wildlife Foundation of Texas, *San Marcos*
- SCHRUM, JAKE B. (JANE), president, Southwestern University, *Georgetown*
- SCHWITTERS, ROY F. (KAREN), S. W. Richardson Regents Chair in Physics, The University of Texas at Austin; former director, Super Conducting Super Collider, *Austin*
- SELDIN, DONALD W., William Buchanan and The University of Texas System Professor of Internal Medicine, The University of Texas Southwestern Medical School, *Dallas*
- SHERMAN, MAX RAY (GENE ALICE), professor and dean emeritus, Lyndon Baines Johnson School of Public Affairs, The University of Texas at Austin; former president, West Texas State University, *Austin*
- SHILLING, ROY B., JR. (MARGARET), president emeritus, Southwestern University, *Austin*
- SHINE, KENNETH I. (CAROLYN), Executive Vice Chancellor for Health Affairs at The University of Texas System Administration, *Austin*
- SHIPLEY, GEORGE (DONNA), president and chief executive officer, Shipley & Associates, Inc., *Austin*

- SHIVERS, ALLAN "BUD," JR., chairman, Shivers Group, Inc.; chairman, Seton Fund; *Austin*
- SMITH, BEA ANN, Texas Court of Appeals in Austin, Adjunct Professor, The University of Texas School of Law, *Austin*
- SMITH, CULLEN, attorney, former president of the State Bar of Texas; of counsel, Naman, Howell, Smith & Lee, LLP; *Waco*
- SMITH, EVAN (JULIA), member, board of directors, Austin Film Society; board of directors Jack S. Blanton Museum of Art, Headliners Club, Trinity Episcopal School & Matinee Media, *Austin*
- SMITH, FRANK C., JR. (KATHERINE), electrical engineer; specialist in data processing and geosciences, *Houston*
- SMITH, STEPHEN ESCAR, Director and C. Clifford Wendler Professor, Cushing Memorial Library and Archives, and Associate Dean for Advancement, Texas A&M University Libraries; *College Station*
- SPECK, LAWRENCE W., W. L. Moody Centennial Professor in the School of Architecture at The University of Texas at Austin, Dean School of Architecture 1992-2001, principal in Page Southerland Page, and American Institute of Architects Fellow, *Austin*
- SPECTOR, ROSE (MORRIS), former Texas Supreme Court Justice, trial judge, and District Judge, *San Antonio*
- SPIVEY, BROADUS A. (RUTH ANN), past president, State Bar of Texas, shareholder, Spivey & Ainsworth P.C., *Austin*
- STALEY, THOMAS (CAROLYN), director, Harry Ransom Humanities Research Center; Harry Ransom Chair of Liberal Arts; professor of English, The University of Texas at Austin, *Austin*
- STARK, LOIS F. (GEORGE), author and film producer; trustee of The Alley Theatre, Texas Children's Hospital, St. John's School, Sarah Lawrence College, Texas Humanities, Texas Commission on the Arts, and the Harry Ransom Center; and a Fellow of American Leadership Forum. *Houston*
- STARR, KENNETH W. (ALICE), president, Baylor University; former dean, School of Law, Pepperdine University; former U.S. Solicitor General; former judge, U.S. Court of Appeals, District of Columbia; *Waco*
- STEINER, FREDERICK (ANNA), dean, School of Architecture, The University of Texas at Austin; Henry M. Rockwell Chair in Architecture, *Austin*
- STEPHENS, F. L. "STEVE" (POLLYANNA), former chairman, CEO, and co-founder, Town & Country Food Stores, Inc., *San Angelo*

- STEVES, EDWARD GALT (NANCY), CEO, Steves & Sons, Inc.,
San Antonio
- STEVES, MARSHALL T. (JANE), president and CEO of Crest Doors, Inc.;
member, McDonald Observatory Board of Visitors; past managing partner,
Mathews and Branscomb; past clerk, Federal Judge John H. Woods, *San
Antonio*
- STOBO, JOHN D. (MARY ANN), senior vice president for health sciences and
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- STOREY, CHARLES PORTER, JR. (GAIL), physician; author; Executive Vice-
President American Academy of Hospice and Palliative Medicine, Palliative
Care Consultant, Colorado Permanente Medical Group, *Boulder, CO*
- STRAYHORN, CAROLE KEETON (ED), (2007–present) president and founder
Our Texas Grandchildren Foundation; former Comptroller of Public Ac-
counts; former Texas Railroad Commissioner; former Mayor of Austin;
president, Austin Community College Board of Trustees; president, Austin
Independent School District Board; *Austin*
- STREAM, KATHRYN SHEAFFER (RICHARD), former senior vice-president and
director of the National Center for Human Performance, Texas Medical
Center, Houston; advisor to the National Center for Human Performance
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- STRONG, LOUISE CONNALLY (BEEMAN), professor of medical genetics; Sue
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- STUART, ANN, Chancellor & President Texas Woman's University, past Presi-
dent, Rensselaer at Hartford, Connecticut, *Denton*
- STUART, CLAUDIA D. (HAROLD), professor of Sociology & Criminal Justice at
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- SULLIVAN, TERESA A. (DOUGLAS LAYCOCK), President, University of Virginia;
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- SUTTON, JOHN F. (NANCY), A. W. Walker Centennial Chair in Law Emeritus,
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- TATUM, STEPHEN L. (NENETTA), attorney; *Fort Worth*
- TAYLOR, LONN (DEDIE), board member, Texas State Historical Association;
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- TEMPLE, ELLEN C. (ARTHUR "BUDDY" III), former member and vice-chair, board of regents, The University of Texas System; publisher, Ellen C. Temple Publishing, Inc., *Lufkin*
- TEMPLE, LARRY (LOUANN), lawyer; former chairman, Texas Higher Education Coordinating Board, *Austin*
- THOMAS, GAIL GRIFFEN (ROBERT), president, The Trinity Trust Foundation, Dallas; founder, CEO, Cities Alive, *Dallas*
- THOMASSON, CHARLES W. (WILLA), lawyer, *Corpus Christi*
- TOBIN, DON, (PEGGY), former president, American Association of Petroleum Geologists, *Bandera*
- TOTTEN, HERMAN LAVON, dean, School of Library & Information Sciences, University of North Texas; member, National Commission on Library & Information Science; former president, Texas Library Association, *Denton*
- TRAUTH, DENISE (JOHN HUFFMAN), president, Texas State University; writer, *San Marcos*
- TROTTER, BILLY BOB (PEGGY), pathologist; emeritus director, Laboratories of Hendrick Medical Center, *Abilene*
- TYLER, RON C. (PAULA), director, Amon Carter Museum, Fort Worth; former director, Texas State Historical Association and the Center for Studies in Texas History; former professor of history, The University of Texas at Austin, *Fort Worth*
- UNTERMEYER, CHASE (DIANA), U.S. vice chairman of Strategic Real Estate Advisors, former United States Ambassador to Qatar, former Assistant Secretary of the Navy, served as Director of Presidential Personnel under George H. W. Bush, former vice president for government affairs and professor of public policy at the UT Health Science Center, *Houston*
- VENINGA, JAMES F. (CATHERINE WILLIAMS), associate professor and chair, Wisconsin Institute for Public Policy and Service, *Wausau, WI*
- VENNEMA, DIANE STANLEY (PETER), author and illustrator, *Houston*
- VICK, FRANCES BRANNEN, former director and co-founder, University of North Texas Press; past president, Texas Institute of Letters; past president, Texas State Historical Association, *Dallas*
- VON ESCHENBACH, ANDREW C. (MADELYN), former Commissioner, US FDA; former Director, National Cancer Institute; former Executive VP and Chief Academic Officer, UT M.D. Anderson Cancer Center; Roy M. and Phyllis Gough Huffington Clinical Research Distinguished Chair in Urologic Oncology, UT M.D. Anderson Cancer Center in Houston; instructor,

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WILDENTHAL, C. KERN (MARGARET), president, Southwestern Medical Foundation, *Dallas*

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