



Smithsonian Institution

Bytes, Stars, Helixes and History
National Press Club
Smithsonian Institution Secretary
Dr. G. Wayne Clough
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[text as prepared for delivery]

Good afternoon. Thank you for the introduction. It is an honor and a privilege to serve as Secretary of the Smithsonian Institution and I am delighted to be here, especially on my one-year anniversary. I am a little hurt that there is no cake with a candle!

Thanks to my colleagues at the Smithsonian, our volunteers, the Congress, and the American people, it has been a very good year for the Institution. Three of my colleagues are here today, leaders whom I have come to respect for their wisdom and innovative ideas. Betsy Broun, director of the Smithsonian American Art Museum; Lonnie Bunch, director of the National Museum of African American History and Culture; and Tuck Hines, director of the Smithsonian Environmental Research Center.

This is a unique time in the history of the Smithsonian, a time for renewal and rethinking what our role is in the life of the nation and the world. We are entering a new era, one that I am optimistic about, and that's what I want to talk to you about today.

In San Francisco a few months ago, I was at a brainstorming session about the future of the Smithsonian with a group of "new millennials." I asked them how we could reach out to their generation given the way they communicated. It was a lively discussion, and at one point a young woman looked me in the eye and said, "surprise me." I have thought a lot about this since then. Of course, this could be seen as a generational issue where millennials are always looking for something new rather than finding value in the well defined and classical. But I think she said something more fundamental, or at least meant to. We know that creativity and surprise are two sides of the same coin. I think "surprise me" means not just doing something new and different, but bringing creativity to bear so that what you need, or want to know, is intriguing, delightful, interesting and makes you want to know more. This is advice we at the Smithsonian can take to the bank.

For my own part, I have had the opportunity to see the Smithsonian in a way few have. Seeing an institution as diverse as the Smithsonian involves hitting the road and this has taken me across our country as well as to Panama, Chile and Kenya, three of the 88 countries where we have operations. If there's anything I've learned in my first year, it is that the Smithsonian is surprising as well as inspiring with brilliant, passionate people determined to make a difference in the life of this country and the world. This is a place where art, science, history, and culture all come together. We have the capacity to tell the story of America and all its hopes, struggles, triumphs, creativity, contradictions, and courage. Today we have the opportunity to reach people with this story in ways not previously imaginable.

I probably inherited an optimistic nature from my parents. I was born in the small town of Douglas, Georgia, and grew up in the Deep South. Some might say that in my younger days I spent a little too much time focusing on fast cars, Elvis, and Anne—my future wife. I worked my way through college, and it was my good fortune to be able to attend two great public universities in Georgia Tech and the University of California at Berkeley. The cars and Elvis are now gone; I am very grateful Anne has hung in there with me. I am blessed to have two wonderful children and three grandchildren, and because of them I take my job as Secretary of the Smithsonian more seriously than I would otherwise, since I believe it is critical that we engage the young people of our nation in what we do.

I am sure you have heard about “Night at the Museum: Battle of the Smithsonian.” It is a great family movie, and we hope you have seen it. It was a chance for the Smithsonian to let its hair down and tell people it really is OK to have fun and let some magic happen when you visit us. Some people still take us pretty seriously, though, because we have had to convince more than one family who had seen the movie that there really are no archives under the Mall. And there is no need to worry that the Smithsonian has “gone Hollywood.” It would be more accurate to say we’ve gone Silicon Valley because of the opportunities offered by technological advances, among them: the enormous increase in digital-storage capacity, the possibility of digitization of our collections, and the advent of social-networking tools. Where we used to speak about digital storage in terms of bytes, we now have in our grasp a petabyte capacity, or one quadrillion bytes.

That means we can now put a vast amount of knowledge onto devices like this. This is aptly called a thumb drive, and on this one there is a sample of much of what we offer at the Smithsonian, with links to more—more info than all the books in all our bookstores. Yet this represents just the beginning.

We know that many American families can’t afford a trip to the nation’s capital. Ultimately, we want to put all of our 137 million objects on a thumb drive and online so you can access them wherever you live. We want to offer the Smithsonian experience to everyone. Technology can help do that. The Smithsonian has long reached millions through the public portals of its museums and its national outreach with our traveling exhibits and loans of collections through our museum affiliations initiative, but soon we can reach billions, among them boys and girls growing up in places like Douglas, Georgia, and new millenials in California.

This sounds promising, but the transformational use of new communications technology is not new to the Smithsonian. The first Secretary of the Smithsonian, Professor Joseph Henry, was keenly interested in meteorological studies. He kept a large weather map in the headquarters building of the Smithsonian and called on volunteers from all over the United States to relay real time information about weather in their areas via the fancy new technology called the telegraph. In doing so Henry was instrumental revolutionizing weather forecasting and in creating what is now the National Weather Service.

To explore what we should be doing in today’s digital age, in January we convened a two-day seminar, “Smithsonian 2.0.” We assembled a group of technology experts, leaders in the world of new and social media, digerati such as... Bran Ferren, Clay Shirky, George Oates, and Chris

Anderson. These folks met with an equal number of bright people at the Smithsonian who are leading the way in use of Web technology. Working together they produced a set of “mind maps” that gave us insights as to how we can link to not only the new generations, but to all who use digital technology to learn and communicate.

During the seminar, one of the digerati met one of our “old-school” scientists, and told me, “Man, I met this cool old guy who explained the origin of the universe in five minutes!” Generations can relate to each other at the Smithsonian. Only last week Mickey Hart, the drummer for the Grateful Dead, asked to talk to our astronomers at the Smithsonian Astrophysical Observatory because Mickey is into taking light waves emanating from space and converting them to sound waves to capture the “sound of the universe.” Only at the Smithsonian.

Picking up on one of the suggestions at the 2.0 seminar, and thanks to a generous gift from Smithsonian Regent Alan Spoon, we will soon hire a new media person who will capture the creativity going on across the Institution—and post it on YouTube where all generations can experience the wonder of discovery in real time.

But the larger point is that “surprise” comes from creativity, from different ways of looking at the world. With its vast resources, the Smithsonian is the place such surprising conversations can start and continue.

This year is the bicentennial of Lincoln’s birth. In February, we conducted a two-day pilot using our six exhibits on Lincoln’s life to see how we might use digital technology and our collections and curators to reach teachers and students. With little fanfare, we had more than 5,000 participants and logins from all 50 states and nearly 2,000 cities. The surprise was that people from 75 countries participated. A teacher from my hometown of Douglas, Georgia, said, “Thank you—next best thing to being there!....The moderators responded to several of our comments. In high school lingo, that was ‘cool.’” This pilot illustrates how the Smithsonian can fill important gaps that exist at the K-12 level using the Web and reach audiences we never had before.

In the fall, we will have a second seminar within a more formal approach, this time focused on global warming, a topic where Smithsonian science brings extraordinary resources. This month, I will travel to Wyoming to see the fieldwork of Smithsonian scientist Scott Wing, who has discovered unambiguous evidence for a period of sudden global warming that occurred millions of years ago. His work allows us to see what climate change really does to the planet, as opposed to the speculation we hear so much of today. And there is much more to our climate-change capability, demonstrated by the work of our scientists at the Smithsonian Environmental Research Center on the Chesapeake Bay and at the Smithsonian Tropical Research Institute in Panama.

Scott’s work could not have been possible without the development of new scientific tools that allowed for deep analysis and sharing of knowledge across fields. What is all the more exciting is that new tools like this are opening knowledge vistas in a wide array of fields. In May, I visited Las Campanas in Chile where the Smithsonian is working with an international consortium to build the Giant Magellan Telescope, a device that will allow us to see stars and universes 10 times more clearly than the space-based Hubble Telescope. The Giant Magellan

Telescope and similar telescopes are like “time machines” in that what we see on Earth from deep space are light waves travelling from events that happened in distant time. The future discoveries from the telescope will speak to the origins of the universe and can change the way we see ourselves and think about our planet.

Not to be left out, our biologists and life scientists are using new technology to do what would have been inconceivable a decade ago, by launching a partnership, an online “Encyclopedia of Life” that will have a Web page for each of the 1.8 million known living species on Earth. More than 160,000 species pages are already posted. On each Web page information is available to describe how the double helixes of the species come together to form the DNA strands that make them unique travelers on our planet. The EOL is available at no cost to scholars, teachers and students alike and is already serving as a means to allow conversations to take place that would not occur otherwise. K-12 science teachers are writing lesson plans and sharing them with others. Children are sending in pictures of species taken with their iPhones on field trips that allow our scientists to link them to the correct Web pages of the EOL. These creative uses of the Web and our ability to stimulate such conversations have enormous implications for science education in the future.

But as you all know, the Smithsonian is much more than science. We offer a world of history, art, and culture, and our future there is no less surprising, no less creative. We have a significant contribution to make to the civic life of our nation.

For example, our Smithsonian American Art Museum exhibition, “1934: A New Deal for Artists,” reminds us that we have survived tough economic times before. It celebrates the 75th anniversary of the Public Works of Art Program with paintings that are poignant and powerful. And to expand the scope of the exhibition, at the suggestion of a Smithsonian 2.0 participant, the museum also put its entire collection of 1934 paintings online, allowing the viewer to see those paintings not chosen for the exhibit. These works have started a conversation that spans generations. It continues at our National Postal Museum with the exhibition “FDR & Stamps of the Great Depression.”

Art can start conversations across cultures also. We offer a world of art—Asian, Latino, American, African American—through our art collections and the many items in our Archives of American Art.

As our country becomes more diverse, it is important to support and strengthen the cohesiveness of our society. Our artifacts and specimens tell wonderful stories illustrating the great American spirit through the eyes of the different groups making up our country. We are working with others through innovative collaborations to clarify what America means to our own citizens as well as to those around the globe. The challenge, as any experienced teacher knows, is to tell these exciting stories in engaging ways to new audiences.

That is what the National Museum of the American Indian does as it tells the story of the land’s first inhabitants to all our nation’s inhabitants.

That is what the newly reopened National Museum of American History does with its Star-Spangled Banner exhibition. It is much more than an exhibition, it is an engaging experience. Through light, artifacts and interactive computer surfaces, you learn the inspiring story of how the flag and the anthem became dominate national symbols for us.

And that is what our latest museum, the National Museum of African American History and Culture will do, when its doors open in the future in its special place on the National Mall.

David Shayt, a beloved curator at the Museum of American History, collected unusual objects that speak to our culture: bells, tools, Playboy Bunnies' costumes, cue sticks, crayons, surfboards, lunch boxes, and much more, including objects from Ground Zero at 9/11 and from New Orleans after Hurricane Katrina. He died last year. He once explained his work saying, "There's an accurate perception that we are forever, that we will care for...and honor an object eternally. That perception of immortality is very precious to people." I think he spoke for all of us at the Smithsonian—and he inspired us.

The Smithsonian is entering a new era, one where we will harness the latest technology in pursuit of our age-old mission. We know we can help our nation and the world face many of the grand challenges that lie ahead. We will do so with all the creativity we can muster, and I assure you, we will surprise you.

Thank you. I'd be happy to answer any questions.

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