On May 15th, 1861, a 31-year-old photographer testified in the U.S. District Court, across the Bay in San Francisco, about a set of images he had made over the past few months. He had been studying the East Bay plain for a boundary dispute, guiding a horse-drawn wagon with heavy glass plates and chemicals across the lands from Oakland to Richmond, using laborious painstaking methods. His name was Carleton Watkins and both photography and the State of California were in their first decades.

In the handwritten court transcripts, now stored just a thousand feet away from here at Bancroft Library, he describes with remarkable detail the open plains of Berkeley, still bordered by giant shellmounds and long sandy beaches along the Bay (whose location you may have crossed at the base of University Avenue heading to campus today). He notes the great forest of live oaks 5 miles to the South, the dramatic Oakland -- still connected to this spot by the old country road we know as Telegraph Avenue. At one point they ask him, almost philosophically it seems, how long one of the nearby creeks, which still flows through Berkeley, had existed. "Since the first rain," he responded.

Watkins died a half-century later after major extremes of success and misfortune. But from these months of careful, laborious work he left us an invaluable legacy for understanding how this landscape looked and functioned in the recent past, for deciding how to manage and restore our streams and forests into the future. He helped us see through time.

Graduation is one of those moments when one inevitably considers the movement of time, when we gain, as through Watkins’ words and images, a larger perspective on our daily lives. Parents find with pride, amazement, perhaps a small bit of shock, that their kids are so grown-up and accomplished. Those
formerly known as "graduate students" consider the incredible amount of time they spent on that thesis or dissertation. One thinks of how many years, often consecutive, spent in school -- now finally over, for at least a while.

It's a moment when one's view through time opens up, when you can see further than normal -- May 15th no longer the dominating feature on the horizon. Today you pass beyond the walls of the city -- this cozy bustling campus established on those open plains just a few years after Watkins' photos -- and the unfolding of your life over the next years starts to take shape in the distance.

For me this moment is also an occasion to think about my time since I was where you are (it wasn't last year -- I do have some gray hairs). And so I have a few thoughts to share from that perspective -- a view back from about ten years after completing my own studies.

And I have some thoughts about this particular moment in space and time, from the perspective of the history and trajectories of the San Francisco Bay Area, California, the West -- since that is part of the work of geographers. And we're all geographers today -- some by official deed, and all of us I suppose at least honorary for the day. All of these thoughts, hopefully, in service of recognizing times past and envisioning those of the future.

In preparing this talk I found myself suitably humbled. First, by the legacy of this department, famously trendsetting, almost equally contentious, and very influential on my own work -- from Carl Sauer to Vance to Professors Walker, Nietschmann, Hooson, and Byrne to Gray Brechin and Josh Collins, who got me started in this work. Even more so, though, I'm honored to be part of this day. It's a gift to get to vicariously share the excitement of this moment, the celebration of so much hard work, culminating in graduation from a pioneering program at an elite university.

I direct a program at the San Francisco Estuary Institute, better known as SFEI -- an environmental science center for the region -- a program in the somewhat obscure specialty of documenting the complicated, often dramatic evolution of California landscapes over the past two centuries since European contact. It's a growing field sometimes called Historical Ecology, with connections to traditions in Historical Geography. We try to develop models of how these ecosystems we inhabit worked in the not-too-distant past to guide environmental restoration and management.

As a fairly small and unusual group we've gained some minor renown in recent years doing things like helping develop the science plan for the ambitious wetland restoration efforts now taking place in the Bay, and initiating a popular billboard campaign to reveal the hidden stories of our landscapes. Combinations of science and art, history and geography. I'm at perhaps an interesting point in relation to you -- about ten years into my career, much less than many of the distinguished folks sitting around me, but enough to become established, to see that this path looks like it's going to work out -- yet recent enough to remember the uncertainty of starting out, the seeming randomness of support and direction. So some notes from a decade in the future:

Looking back over these years, I note first the importance of simple persistence, sticking with an idea. Finding something that interests you and growing it over time. I knew only my general direction when I graduated, something about the interface of ecology and culture, but not the specifics. When I was sent during an internship at SFEI to collect information about wetlands from old maps I realized I was fascinated by the research (even though I was a typical California kid with no sense of history) and worked hard to gradually turn it into my job. When you're immersed in something you love it tends to grow organically. I think your work can't help but be compelling. And when things don't go so smoothly, the hard times are still fun. Given the pressures you'll face I think it's important to try to remember this. To keep your eyes out for those fortunate intersections of opportunity and interest, even if they don't pay that much right away.

Second, in this somewhat self defined field, we've found the benefits of trying something slightly new.
Again, this can be hard to consider when trying to find a job, pay the bills, but it can be worth it. It's important to remember that innovation doesn't have to mean inventing a new technology. It can be combining different fields to make something a little bit different. I was trained in the environmental sciences, find myself becoming an amateur historian, and integrate those in a geographic framework and very applied setting. At times you feel like you fall through the cracks, just don't fit the categories, but it's one of the best ways to define a specialty, to distinguish yourself, create an interesting line of work. I hope you all are lucky enough to find the kind of work that pays the bills and contributes to a meaningful life. I don't think you could ask for a program that better prepares you for the kind of integrative and interdisciplinary thinking that will be essential to meeting the challenges of our time.

Now, having been prepped by the work of a novice photographer 140 years ago, let's consider time in a slightly longer sense. It's clearly an important moment to contribute one's ideas and efforts to the world. I happened to be in Europe two weeks ago on May 1st. On that day ten new countries -- from Hungary to Estonia -- joined the European Union, a remarkable moment in the conceptualization and function of Europe. A French family I visited with reminded me just how remarkable it was that Germany and France are part of the same union despite one invading the other three times in the last 140 years, most recently just 60 years ago. This is also a time in the U.S. when many of the values and policies that previous generations worked hard to establish -- with regard to the environment, the social safety net, human rights, international relations -- are being reconsidered, modified, or jettisoned. And it's an important moment in the history of our landscape, something that I think matters a lot yet is easily overlooked -- but I hope not by geographers.

People often ask me, don't I find my work depressing, tracing the destruction of wetlands and streams, valleys and forests and yes, that's unavoidably true. But even more so, I find myself amazed at what's persisted or even returned. The more we look, the more we find steelhead swimming up streams in Fremont and San Jose, unnoticed for decades. Centuries-old oaks and sycamores hidden in yards and along streets. Beaches and marshes regenerated at the edges of the Bay, of their own accord, in the last 50 years. In fact, for worse or hopefully for better, we've only just gotten started here. The Euro-American occupation of the land is surprisingly recent, superficial -- the legacy of the indigenous landscape almost shockingly fresh.

Take the Bay Area, one of the older parts of the American West. It's been 235 years since the Spanish arrived, wandering lost over the Santa Cruz Mountains in 1769. If we consider that period a week, 7 days, then I myself have lived more than one of those days. Many of us have grandparents or great-grandparents who have lived close to three of those days -- three of the seven days it has taken to go from the native landscape inhabited by a dense and diverse indigenous civilization to that in which we find ourselves today. One realizes this society really are just getting started here, experimenting with how to live in this landscape.

Looking around, we see that in many places the first round of Euro-American construction has just run its course, so that we find salt ponds, military bases, railroads, first generation shopping malls, even the Bay Bridge being rebuilt or redeveloped for new use. In fact almost every element of the familiar and seemingly permanent built landscape -- buildings, roads, powerlines -- will not make it through the century, it will have to be rebuilt and redesigned. The landscape of a century from now will be again dramatically different, the physical expression of the priorities and desires of today's inhabitants.

This challenge suggests an important point, which is the power of simply staying in one place, and paying attention to its subtle details. We are a nation not only of immigrants, but itinerants, constant movers. To create cities and landscapes that canpersevere as vibrant, well functioning systems will require intimate knowledge of those places. This connection to place is something geographers -- who recognize that places are different from one another, that human patterns vary with those places, and that these relationships will affect the future -- are uniquely qualified to develop in themselves and to facilitate in the broader community. So I encourage you to consider staying in a place for a while and becoming an expert, a resource to the neighborhood and region. Your skills and efforts, big and small, will make a difference in shaping this constantly changing world now, and maybe 140 years in the future.
Coming back to Watkins, here at the end, I realize his is not the best example of a balanced, healthy life. I almost hesitate to say that, in fact, he died not only broke but mentally unstable, at the Napa State Insane Asylum, after losing most of his work in the 1906 fires. What strikes me, though, is not so much the drama of his life, but how a small bit of seemingly insignificant but careful, hard work, in this case preserved because it was in these court files, can make such a difference. Just a few months ago our team actually took one of his 1861 photographs and put it on a billboard alongside Highway 580 in El Cerrito, 48 feet wide and in nearly the original vantage point. Suddenly this long obscure photo was seen by 50,000 people a day, many of whom e-mailed us that it changed how they felt on the way to work that day, it expanded their view, helped them see the landscape anew. All from a certain combination of care and persistence, attentiveness to geography and the land.

Now finally, and most importantly, in appreciation for all you've accomplished, I want to encourage you to congratulate yourself, celebrate yourself for getting through all those classes and papers and tests, for setting yourself up for interesting and important careers (hopefully not quite as interesting as Carleton Watkins), for persisting and making it to this day. I wish you all the best of luck in the future. Thank you.