

**USC ANNENBERG SERIES  
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**Interdisciplinarity, Innovation, and Informing the Public**  
*Craig Calhoun*

JACK KNOTT: My name is Jack Knott. I'm the Erwin and Ione Piper Dean and Professor at the School of Policy, Planning, and Development. I would like to welcome you to this evening's lecture on "Interdisciplinarity, Innovation, and Informing the Public."

Tonight's event marks the inaugural lecture of the Dennis and Brooks Holt Visiting Professorship in Communications and Public Policy. It's a joint undertaking between SPPD and the Annenberg School of Communications. The lecture is also part of the USC Annenberg Series on Sustainable Innovation.

The Holt Professorship focuses on the incredibly important role of communications in the policymaking process of a democratic society and a market-based economy. It is concerned with the

regulation of the communications industry, news media influence on public policy, and how knowledge and information are used in addressing major public policy issues. The Holt Professorship will support two to three visiting scholars or prominent practitioners each year, and we anticipate that the Holt visiting professor will hold a prominent government position, be a leader in the news media, or contribute in a major way to academic scholarship and education. The visiting professor will also stay for a short period and play an important role on the campus by giving a guest lecture, meeting with students, participating in classes, and also this public lecture that we are going to have this evening.

I would like to acknowledge that the Hope Professorship was established by a generous gift to SPPD from Dennis Holt, a longtime member of our school's Board of Counselors, and his wife Brooks. Dennis founded Western International Media in 1970, and under his leadership, Western became the largest

and most diversified media management company, and in its more than a quarter-century of existence, the corporation changed the nature of advertising and had a tremendous influence on media-buying practices of companies in various sectors, from entertainment to retail to heavy industry.

Today Dennis is Chairman and CEO of U.S. International Media and Patriot Communications.

I would like to thank Dennis and Brooks Holt for their commitment and support to advancing USC scholarship and education on this important topic of communications in public policy. It was really their generosity that made this professorship possible, as well as this event.

So I would ask Dennis, who happens to be with us here tonight, if he could please stand.

It is now my pleasure to introduce my good friend and colleague, the Dean of the USC Annenberg School for Communications, Ernie Wilson. As a prominent scholar in communications and politics and

public policy, in many ways he embodies the focus of the whole professorship. Indeed, if he weren't dean here, we might be inviting Ernie as professor and lecturer.

I also note for the record that, unknowingly, we have been partners in crime for many years, starting with the fact that Dean Wilson and I were in graduate school together, at the same time, in the same department, at the same university.

ERNEST WILSON: Which shall remain nameless.

JACK KNOTT: Which shall remain nameless.

Please welcome Dean Ernie Wilson.

ERNEST WILSON: Thanks, Jack. It really is a delight to be able to participate with you.

As I said, you are my senior dean. I'm just a sophomore dean. This is just my second year. You have been here longer, three years, so when I needed to figure out what a dean actually does, I could call up my fellow political scientist, Jack, and he would help navigate the deanship.

We are especially delighted to welcome all of you here today for what I think is going to be a very important and insightful lecture by one of the leading American intellectuals in this field.

It also gives me great pleasure to welcome back to the fold Dennis Holt, who has been affiliated with the Annenberg School for a number of years on our Board of Counselors and who knows very well the work that we do in the profession and field of communications. He is, himself, an innovator, as you heard from the very brief introduction. Part of what we are trying to do at the Annenberg School these days is to understand the notion of sustainable innovation – not just innovation once, but the capacity to generate repeatable innovation. Clearly, Dennis Holt is a man who has been able to do that across multiple media platforms over a number of years. So I think it's altogether fitting that we have this discussion today jointly between our two schools.

Another innovator is a man by the name of Craig Calhoun, who is our first Holt Lecturer. He is respected widely in the world of practice and in the world of the mind, the world of theory, for a number of reasons. One is because he holds the presidency of the Social Science Research Council, which, for those of you who don't know, is sort of the high church of pure research and scholarship and the life of the mind and all that sort of stuff.

But when he first became president, he kind of went out on a limb. He really did. He did kind of an intellectual and institutional innovation. He said, yes, we can have excellence in the social sciences, excellence in conceptualization, excellence in theory, but we can apply that excellence and those concepts and those theories to real-world matters that really count. We can count the number of angels on the head of a pin – that's one thing we can do with theory – but we can look at issues like HIV/AIDS; we can look at democratic participation; we can look at

the diffusion of the Internet and other technologies around the world.

I like to think of Craig as someone who is concerned about both intellectual innovation and also the way that intellectual innovation has an impact in what we really do in the world.

Craig, as I said, is President of the Social Science Research Council, which guides a lot of the scholarship and funding and support that the social sciences receive in the United States. He also directs the new Institute for Public Knowledge at NYU, New York University, where he is also University Professor of the Social Sciences – notice, not just sociology, in which I think he got his degree, but University Professor of the Social Sciences.

He received his doctorate from what we call the USC of the U.K., Oxford University. He also has degrees from Columbia. He has a degree from this institution as well, in film studies.

He has a number of books. I won't read

through all of them, but they touch on all the important subjects that one might imagine for a man of his standing and experience.

So it gives me great pleasure to welcome my friend, my colleague, to give this first Holt Lecture. I invite Craig Calhoun to the podium.

CRAIG CALHOUN: It's a terrific honor to be the first Dennis and Brooks Holt Visiting Lecturer. It's an honor simply to visit all of you. It's a pleasure to be both in the Annenberg School and in SPPD. It's a pleasure to visit my alma mater. So I'm very grateful for this opportunity.

I was telling my barber when I got my hair cut for this opportunity that I was coming here to do this. He asked me what I was speaking about. I tried to explain to him that I would speak on a subject that was important to me: interdisciplinarity and innovation and informing the public. He said, basically, "Huh?"

I tried to explain further, especially, the

issue of interdisciplinarity, part of the title. He listened. My barber is an Uzbek Jewish immigrant to the United States. We have extended discussions which usually revolve around Israeli policy or recent developments in Russia. But this time he asked me to explain what interdisciplinarity was.

I told him that academics have a hard time reaching out to people beyond their specialties, that there is a lot of tendency for the inside conversation to be highly valued and the outside conversation to be seen as a sort of optional extra; that people get into very close-knit research groups, not just inside their disciplines, but inside subdisciplines, inside research fields; that different journals anchor the discussions.

I explained all this, and he said to me, "If I don't talk to everybody, I got no business. Why you don't talk to everybody?"

It's actually a reasonable question, I have to say.

Of course, you can't talk to everybody all at once, all the time. There are a lot of different media and a lot of different connections among disciplines, and indeed in reaching and informing a broader public. I want to try to explore a little bit of the issue today.

I have to, in addition to quoting my barber, quote my temporary co-dean for three days, Ernie Wilson, and tell you a little bit more about that. I have to first tell you that if interdisciplinarity is what sometimes it is rumored to be – that is, a sort of scam excuse for not being a complete master of the disciplines – I qualify. I actually don't have any degrees in sociology. I have degrees in a variety of different subjects, from great institutions like this one, where I studied anthropology and cinema, and went on to Oxford, where I got a degree in modern economic and social history. I have been employed as a sociologist now for 32 years without a degree.

So I've said it here. They have filmed it.

I am extremely well qualified to speak on the subject of interdisciplinarity.

I was emailing and then speaking on the phone with Ernie about what I would talk about. I said, as academics are wont, "Shall I talk about my research?" That's what everybody is eager to talk about.

Ernie said, "No, not that. Talk about innovation. I always talk about innovation. You should talk about innovation, too."

So I'm trying to support this issue and to talk about innovation.

We went further and he said, "Talk about what makes a discipline or a field or a profession, and what the relationship is among these. How do universities do it? Talk about your concept of necessary knowledge."

So I'm taking directions. This is not simply a research presentation; this is my correct views on everything. I realized, in other words, as a

result of this discussion, that I had not been invited as an intellectual, but as the president of the SSRC.

I am, however, going to insist that the two are related and that a variety of the administrative and organizational and, indeed, financial challenges of the contemporary university are very closely interwoven with a set of intellectual challenges and with a set of questions about the broader mission: What makes the pursuit of knowledge necessary and valuable, as distinct from some sort of optional extra?

I'm also going to insist that when we think about innovation, and indeed sustainable innovation, we think not only about repeated innovations – hitting several homeruns – but about the way in which the baseball player gets better at hitting homeruns by monitoring what he's doing, by learning about the opposing pitchers, by paying attention to the different stadiums – that is, in an iterative process of deepening and continually improving the innovation,

which is, in fact, a reflexive process of a kind of research for that baseball player, but for us as we get better at it.

So the innovation is not just coming up with that one new idea. It is coming up with effective ways of continually improving your ideas, your ability to communicate your ideas, your ability to make them effective, which means, among other things, finding ways to learn from the people you think need to learn from you – the recipients, the users, the potential beneficiaries of the idea.

Moreover, I think we need to be reflexive in the sense that we need to ask about the conditions of our work. Here I'm mainly going to mean academics, social scientists, people in closely related professional worlds. The conditions of our work, the ways that we are supported by, enabled by universities, are undergoing dramatic changes. They are undergoing changes even more dramatic than are readily apparent to most of us most of the time. I

will say a little bit about this. This isn't a talk mainly on the transformation of higher education, but I want to sort of get out at the beginning that it seems to me that if we are going to navigate the changes that are coming, if we are going to navigate the changes which are in midstream in our worlds, we had better be thinking about them, studying them, reflecting on them, and making that a part of our innovation.

But we also need to be thinking about the purposes of our work, why we are here, what we are invested in, what we think is the good that we are producing, and for whom it is good.

Finally, we need to think about the practices on which we rely, the techniques. I'm going to engage in one partially outmoded practice right now, that of giving a lecture that lasts a little bit longer than it should – I hope not so much that you go to sleep. But I did just learn a few days ago about some research that has been done that is disturbing in

this front. Based on studies of academic lecture presentations on the Web and when people click out of them, it appears that people are only really willing to listen to an academic lecture, on average, for 18 minutes – even when it says at the beginning that it will last for 15. That’s actually a disturbing thought for all of us who give these lectures for our living to large audiences of students who have their computers open and are undoubtedly doing something else at least 18 minutes into the lecture, if not immediately.

But I am going to talk for longer than 18 minutes. I will not talk forever, though, so you have hope in this.

I think, really, the point is that we rely on a variety of practices – lectures, writing journal articles – which we don’t really rethink. We learn them as undergraduates and in graduate school. We improve our technique as junior faculty. We become invested in them. They are part of our capital, our

stock in trade, our tools. Like anyone with a hammer, we look for nails. We keep reproducing them in a variety of ways, and only under some circumstances do we innovate.

But the practices can be the focus of innovation as much as any of the content. We value innovation hugely, because we value new ideas, new research findings, new approaches to the work we do in our discipline, new research methods – new, new, new, new, new. But we often don't then turn that lens back on ourselves and say, what are new ways to be effective in what we do, and how does that change, not just with the availability of a new technology – how we integrate electronic media into our thinking – but with a changed context – changes in our student bodies, changes in the organizational structure of the university, changes in what's happening outside of the university?

A simple example: When the social sciences became disciplines in the early 20<sup>th</sup> century and began

their process of forming disciplines – and that’s something I’ll say a little bit more about in a minute – one of the features of this was an orientation that said they were going to be a whole lot more educated and expert on every topic they talked about than the people they talked to. Most professions have a similar sort of orientation. A hundred years ago, the physician, the minister, sometimes the lawyer – but not always, because law was a laggard in this – was the most educated person in a small town, or part of a handful of educated people. Part of their role in a small town was to be educated people, in general, able to provide certain sorts of leadership to the town.

One of the transformations in the world over the last 100 years, one of the transformations in the United States, especially over the last 50 years, is an enormous growth in higher education, an enormous growth in how much education everybody has and how many different kinds of professionals and people with

higher education there are.

Yet we academics tend to retain a notion that we are highly educated experts speaking to people who are defined by not knowing whatever it is we are experts in, and we forget the extent to which they are experts in a variety of things. We forget when we are dealing with businessmen that they are probably holders of advanced degrees, in many cases, and in any case, enormously educated by their practical work. We forget when we are talking about reaching out to social activists in various movements, to people working in NGOs, that they are us. They are more and more us all the time, because graduate students are more and more taking nonacademic jobs. People with Ph.D.s are working in all sorts of sectors, people with master's degrees, people with advanced professional degrees.

So one of the conditions of our work that has changed is that it can hardly be defined entirely by bringing knowledge to the uneducated. That may

never have been a great definition, but it's an impossible definition now. We are engaged in relationships among people who have lots of knowledge, who have different kinds of knowledge. We are often co-producers with other people we are in relationships with of better understanding of what's going on.

Now, this doesn't mean that we don't have knowledge. The learning behind each of the disciplines and each of the professions has grown enormously in that same period. The expertise is deeper, the extent of knowledge of those who come out of the Ph.D. programs is greater, but their work is going to be interrelational with other people who have lots of knowledge. It is not going to be simply a matter of saying what they know to people who can be defined merely as recipients.

We know things that are important. (And I'm going to honor Ernie's request that I say something about necessary knowledge in a minute.) We know things that are necessary. We own things. We have

something to enter into this trade with. But we had better have respect for our counterparts in a variety of arenas as we do so.

Let me say a little bit about innovation up front in this. We academics are brilliant at innovating in the content of our work – although not actually as brilliant as we think we are, but still pretty brilliant. We academics are mostly blind with regard to the form and practices and conditions of our work, even with regard to what's happening in the university as an organization. At the moment, we don't have a choice about whether to change. Economic conditions, technological transformations, globalization, shifting public demands, and a range of new entrepreneurial institutions outside universities ensure that change will happen.

But change only counts as innovation when it is produced with some degree of choice and self-consciousness. You can't claim as your innovation things that just happened to you. That means you have

to approach innovation with knowledge, with some degree of foresight, with appropriate modesty that you don't have complete foresight, which is why, as I said a moment ago, the innovation process is continuous, needs to be sustained and sustainable, because it needs to be a process that is iterative, not just a one-time advance decision, but based on knowledge and renewing knowledge, on learning from the process in which the change is being made.

I like the example of the extent to which, in the design professions – making various kinds of consumer products, for example – there is a self-conscious use of social science, ethnographers and survey researchers who are doing studies of how products are being used, which ones are being used, what people like and don't like about them. The design process is not something designers do once and for all up front and then put the products out and just see what happens – well, actually, they do do that sometimes. It's actually a very risky business

proposition.

More commonly – and more commonly all the time – they hold focus groups, they build prototypes, they test the prototypes, they study what's going on among the populations who use it; they find out that people use things for different purposes from what they originally built them for, they modify their marketing plans, and so forth.

We are actually unusual in the extent to which we imagine that what we should do is, first, produce the complete story, the final knowledge, the findings of our research project, and then market them, disseminate them, get them out, rather than, as we produce them, enter into relationships with the people for whom they are going to be necessary knowledge, find out how they are going to be used, what matters, what's important, and whether people are actually going to pick up on what we have to say. We may or may not care whether the broad public picks up in every case. We may sometimes be producing for

relatively specific groups. That's okay. But it is important to be engaged in thinking and learning about the work we are doing while we do it, and it's important to be building relationships, because the eventual use of the knowledge depends as much on those relationships as on any after-the-fact dissemination technique that might be deployed.

I'll come back to this in a moment. Let me honor Ernie's request first that I say a bit about this concept of necessary knowledge.

It's a concept that I began to use at the SSRC when I realized that one of the things that we confronted in the field of social sciences, broadly understood – and here I'm including communication and journalism in a very wide net of research fields – one of the problems that we began to confront was the understanding that while what we knew might be real, it was an optional extra. Indeed, some people weren't even sure we had so much knowledge, but, in particular, they were often of the opinion that it was

sort of extra to what they were trying to do in various ways. I think we have to start by asking ourselves, what is the necessary knowledge that we build in our fields and that we bring to these interactive relationships with a variety of users and consumers and counterparts, and indeed people in other disciplines and people in other parts of our own disciplines?

So social scientific knowledge, I wanted to suggest, was not an optional extra, not just useful; it was really necessary. There were a lot of real-world issues that depended on having better social knowledge.

But then, of course, that led to the question, necessary for whom? Who are the constituencies for whom this knowledge is necessary? Is it just posterity, in some sense, in which it is necessary that we record our findings in the archive, which is placed in the library and they are there? Or do we believe that there is a constituency for this

knowledge now? Again, let me stress, that doesn't always mean the broadest public. It may mean that you are developing a research technique, a tool, and your constituency is a variety of other researchers who can use that methodology to do their research. But you still have the same question of figuring out what your constituency is and how you are going to reach them and how you are going to make it effective in their hands. Sometimes you want to reach a whole profession. Sometimes you want to reach the general public. It's a question about constituencies.

We don't think very often of constituencies. We think a lot about getting our findings right, making sure our knowledge is sound. But I think we need to think a lot about constituencies. As I have suggested, there are a variety of them – practitioners, policymakers, broader publics, as well as our colleagues and intellectuals.

There are a lot of different modes of communication for reaching those constituencies. As

soon as you think about the idea that what you are learning in your research might be necessary knowledge – and probably ought to be if you are devoting your life to acquiring it – and then you think that that necessary knowledge must have some constituency for whom it's necessary, you might begin to ask yourself whether you have thought through your communication strategy for your necessary knowledge very well. If you are like most academics – like me, certainly, for most of my career – your approach to this was to think, "Right, I've got some great findings. I've got a great analysis. I need to publish an article in the most prestigious journal in my field," and you probably don't stop and think that, rather disturbingly, the impact factor, the net number of citations per article for the average academic journal, is between .8 and .9. That is, it's less than 1.

Publishing those journal articles does something. It certainly builds your résumé and it

will help you get tenure. It has various sorts of functions. But in most cases it's hard to think of it as strategic communication – strategic something, but not strategic communication.

Maybe you say, "Oh, well, 12 people read my article, not just .9." Fine. Under some circumstances, reaching those 12 people is the crucial thing, but not always.

So thinking through how each of us communicates and how whole fields communicate, it's important – asking yourself a question like, what would you publish if there were no academic rewards for publishing? Or another way to put it: Suppose you had to pay or suppose you had a quota allocation. Suppose the system were enacted not of rewarding the volume of publications of faculty members, but telling faculty members that they were allowed to publish two articles a year, no more. It might actually improve the articles – a little bit more care in the production, a little bit less haste. It might be good

for the environment – fewer trees cut down.

There are a variety of questions here. It's not obvious that we are thinking and asking ourselves these questions, collectively, in our practice.

We also need to ask about the range of different relationships we are building – face-to-face for certain kinds of communication, broadcasts for others, highly interactive for others, and so forth. In other words, the kinds of questions communication researchers are asking all the time about all sorts of communications need to be asked about the world of knowledge as a world of strategic communication.

Now let me step back a bit to a sort of historical account, although very fast and sketchy, and then some more contemporary reflections.

One of the backdrops to this that I can't begin to even sketch, let alone do justice to here, is a long-term transformation of universities and of our disciplines. But let me just kind of evoke a couple of high points in this.

The growth in scale is nothing short of astonishing between the beginning of the 20<sup>th</sup> century and about the 1970s, after which it slows down dramatically. We move from a society in which hardly anyone has a college degree to a society in which the majority of the population has a college degree.

A college degree changes its meaning. We move from a system in which any college degree is a basis for membership in an elite, in which getting a college degree may be the condition for staying in a very middling middle class, not even joining an elite. We proliferate graduate degrees. We proliferate faculties.

We change the cost structure of universities – a cost structure which at large and ambitious universities is driven very significantly by research, so that we had better be asking how that research generates necessary knowledge and for whom, because it makes it expensive, including making it expensive to be an undergraduate at those

universities. Rather amazingly, our science policy in the United States, our policy for the funding of science, is mainly to fund it by tax dollars, on the one hand, distributed not through the National Science Foundation, but through state legislatures subsidizing public universities, and by undergraduate tuition payments on the other hand – that is, by the families of undergraduate students paying for the scientific research. They don't always understand that they are paying for the scientific research when they write the tuition check, but they are.

We are a country that has valued scientific research, but that is a very peculiar funding structure for it. Among other things, it's a funding structure which sets up a need for some strategic communication, because by and large, when we make our lists of who we are communicating to about our scientific work, we do not have on those lists the parents of our undergraduates and the members of state legislatures. But we should, because if we aren't

making it evident that this is necessary knowledge, if we are not communicating to those arenas, we do not have very good reasons to expect them to keep paying our bills for very long.

There's a lot more to the transformation of higher education than just growth, but growth is sort of a simple indicator. The size of universities changes enormously. Their internal complexity changes enormously. They become – almost every research university in the country – a conglomerate corporation, a kind of corporation that has actually gone in and out of fashion in the business world. Nobody, I think, would set out to tell entrepreneurs today to build corporations like Ling-Temco-Vought, if anyone remembers that one, or a variety of others that cobble together wildly different businesses and imagine that the same managers would understand how to run them all. This was a very popular organizational form at one time. It's a very problematic organizational form, which is the reason why it has

been reduced in prominence.

Universities, however, have remained conglomerate corporations. They run housing operations and parking operations. They run medical schools and law schools and undergraduate liberal arts programs. They buy hospitals. Wait, where did I get that idea? (Laughter)

Universities are in the business of running lots of different activities, on the principle of interdisciplinarity, on the principle that they inform each other, on the principle that they belong together. But, in fact, it's not obvious that they are always going to stay bundled and packaged together. As anyone who looks at the business history of the conglomerate corporations and looks at downturns will say, there are not only mergers and acquisitions; there are points at which divisions are sold off and closed down. If the university is a bundle of different activities based on the principle that they inform each other, then we had better think

about how they inform each other, which is indeed part of this question of interdisciplinarity and how things work in the university.

There are a variety of other issues that I won't go into. There is transformation in the legal regime. There is transformation in labor markets and how this works for academics.

But my point about it really isn't to try to tell you everything about it, but encourage you to ask about it. It's changing as we speak, and knowing about it is a condition of being a good reflexive practitioner of the profession of an academic, whether as a student or as a professor or as a member of the board. It matters how the institution is changing and how it's being challenged now.

Let me situate interdisciplinarity in this history for a moment. Interdisciplinarity was born about as soon as disciplines garnered strength – or at least the word was coined. I have said in a couple of other discussions here that it actually was coined in

the invention of the SSRC, the organization I head. We are very proud of this – there is a catch, I warn you – we are very proud of the fact that in inventing the SSRC in the early 1920s, the group of Columbia and Chicago professors who spearheaded the effort invented the idea of interdisciplinary work. They said that the problem that was leading them to form this new organization and to ask the Rockefeller family for money was that, left to themselves, researchers would talk only to each other, and in ever-smaller groups inside their disciplines, and that that was a problem not just because they wanted them to talk to each other, but because they wanted them to tackle big social issues which required the perspective of many different disciplines in order to understand them and resolve them.

The catch is, unfortunately, that we seem to have failed in this mission. We have worked on it very hard – I assure you we have worked very hard – for more than 80 years, but it is still a basic

problem. We have not found a magic answer, and there is – I will go further – no magic answer. There are, moreover, various times when interdisciplinarity, exploding the boundaries of the discipline and innovating that way, is crucial, and there are also times when consolidating research communities is crucial, and establishing strong bases for the training of people within fields.

There is really a dialectical process between exploding the boundaries and rebuilding communities. It is not one or the other. It is not that you always want to explode the boundaries, unless you are simply an anarchist, in which case that may be your political conviction, but it is actually a problem for the organization of universities. So there is a limit to this. In fact, it's a weak understanding of anarchism, which actually doesn't depend always on exploding things. It depends, actually, on trying to get rid of illegitimate powers in order to have more legitimate collective processes

of figuring out what the communities should be.

This story is a partly inadequate story. The word "interdisciplinarity" gets coined in 1923. In fact, universities were in many ways interdisciplinary before disciplines. The disciplines were an innovation of only the very late 19<sup>th</sup> century and early 20<sup>th</sup> century. There is a whole story in which they get formed and they hive off from each other. The centerpiece of that story is that the university gets restructured around research rather than around scholarship. Rather than around the idea of trying to pass on knowledge that has been tested through time, organized in the trivium and quadrivium of the Seven Liberal Arts and so forth, it gets reorganized around research. There are two big moments in this. Again, I can't tell the whole story.

One of them is largely the borrowing of a German model and rethinking the university, creating Ph.D. programs, notably at Chicago, but initially at Johns Hopkins, as a central start of this. So Johns

Hopkins University pioneers the idea of a graduate school and Ph.D. programs in the 1870s. Before that, it was extraordinarily rare for any professor to have a Ph.D., and the graduate degrees they did have were almost all honorary. You got a bachelor's degree in theology and at some point they gave you a doctor of divinity because your hair had turned gray and you had stayed respectable the whole time. But the education was an undergraduate education.

The idea of new research, new knowledge shaping it is pretty recent, in other words. In the 1870s, it starts changing and it starts spreading out. Johns Hopkins' history program gave rise pretty much to the whole social sciences. The history Ph.D. program at Johns Hopkins first split with economics and history as the two divisions. Political science was a subsidiary of history. Sociology was a subsidiary of economics. They split apart around the turn of the century into different groups, and they created different professional associations. Then

sociology split off from economics and political science split off from history.

In this process of division and mutation, a variety of different fields were formed, each of which then had a certain pride about how it was better than the others, and why. They had a series of arguments. Some of them said they were technically better and others said they had mastered the detail better. Some of them were more progressive (read "left-wing"); some of them were more institutionally respectable (read "conservative"). But they had the series of arguments that we are familiar with to this day, from about that time, as disciplines.

The other moment in creating this structure is actually the creation of the land-grant university system in the United States and, more or less simultaneously, the technical institutes, like MIT — the creation, in other words, of specialized institutions which understood themselves as producing necessary knowledge. The whole idea of the land-grant

university system – a remarkable idea in the United States, a historical idea at this time, of funding the creation of a variety of universities which would have as part of their mission undertaking knowledge production in order to meet social needs, in order to serve social problems, and would have built into their structure not only the research institutes associated with that, but the extension services, like agricultural extension services, that would get knowledge from the agronomy department or the plant biology department out to the farmers, and a variety of other similar things.

The distinction of land-grant universities from the rest of universities has eroded over time. Michigan State doesn't look as much different from Michigan as it used to at one time. It lives on a bit.

But the point is that there was a very strong impetus towards producing knowledge for use, necessary knowledge, to solve social problems. That,

too, was part of the story of restructuring the university around research, because the notion was that this was not the knowledge that was being taught in the classical curriculum. Farmers may have wanted to learn Latin and Greek for various reasons, but not for farming reasons, primarily – mainly for religious reasons.

The disciplinary social sciences, as they emerged from this context, were actually very big in the land-grant universities. Social science emerged a lot around the idea of meeting social needs of various kinds, for all scales, from international relations to very practical issues of things like rural sociology and what happens in small communities or dealing with immigration.

But it developed vis-à-vis some things that were not disciplinary social sciences. They were two things, mainly:

- An older idea of integrated curricula, which is what defined the university, the idea that

encompassing and connecting the whole universe of fields of knowledge was a project and a purpose of a university – something that I think we have forgotten. I think we have forgotten that we are not just so many separate knowledge producers, but that part of our project has been the connections among these different forms of knowledge. That's what made a university.

- At the same time, social movements. The other sorts of ways in which people engaged in knowledge formation for social use were largely in social-movement contexts, often mediated through the church and religious organizations, but in a variety of other ways.

The American Social Science Association, the predecessor of all the major separate disciplinary professional associations, was basically a collection of reform intellectuals, people who did things like trying to promote the collection of statistics on migration or on poverty and welfare programs, in order to be able to do better policy work, whether they did

it on behalf of what we would now call NGOs – that is, benefit societies or something like that – or whether they did it on behalf of the state. It was a largely seamless body of amateur intellectuals. It was in professionalizing that they created the disciplines and then, in later professionalization, the professional schools, in many ways, in relation to the social sciences.

One of the things to think about is that they did that with a very acute sense that this was a better way to meet a public need, that the point of that professionalization of research methods to have better scientific sociology and economics and so forth was in order to meet social needs better.

That's not always equally clear in professionalization of the disciplines today, but I don't think it has gone away. I don't think it's a not-reclaimable legacy. I think it's crucial to think about the public mandate. That doesn't mean just to think about how you get people to like you, pay

attention to you, quote you in *The New Yorker*. It means thinking about what the point of the work that you are doing is, in many ways.

Let me go into a little bit of depth. In the U.S., these concerns informed the creation of the SSRC, as I said, this research council, in 1923, with the idea of interdisciplinarity. Let me just quote a couple of passages about how this is thought of in this period.

Charles Merriam, a political science professor at the University of Chicago, was central in conceiving the SSRC. He called for the closer integration of the social sciences themselves. "The problem of social behavior," he wrote, "is essentially one problem. While the angles of approach may and should be different, the scientific results will be imperfect unless these points of view are at times brought together in some effective way, so that the full benefit of the multiple analyses may be realized."

He had already mastered the art of writing in journal-article prose.

By September 1930, the SSRC was already reexamining and restating this existing policy, when it declared – and I quote from its annual report – “The Social Science Research Council is concerned with the promotion of research over the entire field of the social sciences. The Council’s thinking thus far has been largely in terms of social problems which cannot be adequately analyzed through the contributions of any single discipline. It is probable that the Council’s interest will continue to run strongly in the direction of these interdisciplinary inquiries.” And indeed it has.

But the reason they wrote this is that they were already receiving annoyed mail from representatives of the disciplines saying, “Why are you always favoring these interdisciplinary inquiries? It’s so unfair.”

The SSRC leadership was quick to affirm that

the Council was, and I quote, "quite aware of the fundamental place which several recognized disciplines occupy in the upbuilding of more effective scientific research in the social field."

And so it has gone ever since, not just at the SSRC, but on every research university campus there are interdisciplinary projects, often centered on specific social problems, in a somewhat real-time contemporary orientation, which exist in a sort of dialectical relationship to disciplines seeking to build up effective scientific research and to organize it within their different boundaries in an implicit division of labor.

There are various different agendas for interdisciplinary social science. Let me just allude to this quickly. I think it's important to see that it's not a one-size-fits-all phenomenon. It's not simply enough to say, oh, well, anytime two people with different disciplinary backgrounds happen to get a job in the same program, it's interdisciplinary.

What are the purposes? What are the agendas here? One sort of agenda that has driven interdisciplinarity is comprehensive knowledge. That's what drove it in the old model of the university: We need to bring all these different fields together and get a comprehensive command of things. It's what drives it when undergraduate curricula have distribution requirements. You have to take three semesters of science and three semesters of foreign language and these sorts of things – the idea of a sort of comprehensive whole to knowledge.

This is often tied in research to the idea of understanding concrete cases in their complexity and fullness. A very strong example is the area-studies traditions – Southeast Asian studies, African studies, Latin American studies, and so forth – and people within those who try to bring together different disciplinary perspectives in order to understand China or Chile or whatever case. The assumption of the area-studies programs is that to

understand any of these place-specific phenomena at the national or local level, at the regional level, you have to understand how the different dimensions of them interact. That's true as well in trying to understand the United States. It's not just a political country or just an economic country or just a social country. It is produced by the interaction of a variety of phenomena. So the area-studies traditions were always interdisciplinary, always bringing together a range of social science and humanities faculties, so long as they existed.

They actually went out of fashion and got deeply damaged and reduced in stature in the university, especially after the end of the Cold War and with the spread of the notion that globalization was sort of a general phenomenon all over the world, rather than something that was having deeply different character in various different settings, and therefore still needed to be understood in that way. They are sort of enjoying a comeback now.

But the key is comprehensive knowledge of a particular case, place, region, so forth.

A very different kind of interdisciplinarity has been driven by the pursuit of better tools and has often relied on abstraction in various ways. A good example is the spread of quantification in the social sciences. This was really almost a social movement, a very interdisciplinary project. It involved creating summer institutes in which social scientists of different backgrounds would come together to learn how to work with quantitative data, the ICPSR creating its archive for data, the range of survey research organizations that were created and peopled and brought together. NORC and ISR were organizations that brought together social psychologists, sociologists, economists, political scientists, in the project of gathering certain sorts of data.

It actually led to surprising amounts of movement across fields. People who had Ph.D.s in one field but became strong survey researchers were hired

in a disciplinary department which was different. Philip Converse, for example, as some will know from older generations, moves between sociology and political science because there is a need for a survey researcher at a new institution.

So quantification drove this, but it often drove this in a kind of abstraction, the opposite end of the continuum from the area studies, not because they were essentially opposed, but because the goal here was technique. The goal here was a transportable technique that could be used in lots and lots of different cases and kinds of research, in many ways.

A third agenda, one often forgotten when people talk about interdisciplinarity, is practical action, practice. To some extent, that has to do with social problems, and to some extent, it has to do with professions. Let me say just a little bit more about this before I go.

Professional schools are perhaps the central sites of interdisciplinarity in the modern university,

often without anyone calling it that or noticing it.

It's often the professional degree that anchors it:

- The medical degree, which is very different from a little bit of chemistry, a little bit of biology, a little bit of different fields. It's about the way they are integrated.

- The MBA, which is a degree that has created a very interdisciplinary discussion among business-school faculty members who may have roots in economics or finance, in organizational behavior – i.e., sociology or psychology – in marketing and various other sorts of fields, brought together by teaching very intensively in common.

Actually, MBA programs are among the best-taught programs at universities. Whatever else your opinion of the business world is, MBA programs are among the best-taught programs. They are best-taught partly because they understand themselves as marketing a product. They listen to their customers. They engage in iterative innovation. They are very strong

in trying to maximize their effectiveness, and their perceived effectiveness, for their clients - i.e., their students - and they demand of the faculty members who teach in them that they not just teach different classes, with no strong relationship to each other, but that there be an integrated curriculum to a much greater extent, breaking things down into small modules in a variety of ways.

Worth learning from and noticing.

Professional schools have had an enormous growth in research universities, including this one. In some, they have always played a very central role. Actually, USC, from fairly early on, has had a strong component of professional schools. In some other cases they are additions onto the core of an undergraduate program that predated them. But they have grown dramatically. They have grown so dramatically that they account for the overwhelming majority of the budget in most research universities, only people in the arts and sciences don't know this,

and presidents don't usually say it, except in private meetings with their board of trustees or their provosts and deans. What they say is the arts and sciences are the heart of the university. They are speaking, in part, to the parents of those students. They are paying the bills, remember. They are also speaking about a model of the university in which that's exactly what the arts and sciences would be. The arts and sciences would be the heart of the university, not just in the metaphorical sense; they would be the center of the university. They would provide connectivity among the different professions, among the different uses of knowledge, among the different fields. The arts and sciences would be the glue that held the university together.

That is very seldom true anymore. In fact, there are increasing changes in the professional-school world. The professional schools have become centers of dynamism and transformation in universities. Arts and sciences are often much more

conservative, much more stuck in their disciplinary models. They certainly have interdisciplinary centers and programs, but slower to change.

They may value, and you may share the value of, some crucial kinds of knowledge. You may say it doesn't need to change. But the effect is that the dynamism is largely around the periphery of the university – what used to be seen as the periphery – not the heart. The professional schools form bilateral and trilateral linkages. The law school links up with the business school. The communications school links up with the school of policy and planning and development. There are a range of these linkages. The IT revolution has done much more to link the work of the professional schools than to link the faculty in arts and sciences.

Now, it's not inevitable. You can do better or worse, and you can have better or worse leadership in the arts and sciences, and you could have more or less creative faculty. But the broad pattern across

the full range of leading research universities has been like this. The professional schools have grown. The professional schools have been interdisciplinary. The professional schools have been quicker to embrace new technologies and have been more dynamic in other ways.

In addition, the professional schools have been much more closely linked to a range of local constituencies, particularly in universities in large urban areas, like the one we stand in. That is to say, there is a kind of link to the local constituencies that is mediated by freshmen recruitment and parents and football and fraternities and sororities. There is a link to some local constituencies mediated through the undergraduate programs, but it's very different from the kind of link that is forged from professional schools to their professions.

You will remember that I said earlier that when we talk about informing the public and reaching

out from the university, we are not always talking about broadcasting. We are not always talking about writing a book that is available in every bus station in the country or something like that. We are often talking about informing groups of professions whose practice involves relating to the public in different ways. So it's not always that academics need to think that their work immediately becomes popular in order to serve the public. It is important that it reach various constituencies and they think about how it's used in various ways.

Let me take just a minute to give an example of something important from a recent SSRC research project – not mine, so I'm not reporting on my research. This is what academics always want to do, to report on their own research. I'm reporting on one of my colleagues' research in a MacArthur Foundation research project – actually, one that has a USC connection through John Seely Brown, who has been active in parts of it. The SSRC part of it studied

how a capacity for interdisciplinary work was achieved through different kinds of graduate education. I'll be short about it, though it's an interesting, innovative program.

First, it's an interesting research design. They essentially study the interdisciplinary graduate education and research training programs of the NSF, the IGERT programs, which train a lot of people. They focus on fields like environmental sciences and so forth. There are two basic kinds of interdisciplinary programs. There are those where you have a lot of work in a discipline and it's supplemented by substantial interdisciplinary work, and those where all your work is in the interdisciplinary field, whatever it may be.

They designed a research process to study this in which they would pose practical problems. This is modeled on the design world that I alluded to earlier - the making of consumer products, the doing of design and architecture in other fields. They

introduced charrettes. The term "charrette" comes from the carriage that carried people to the guillotine in the French Revolution. It got picked up by architects and others who engage in time-limited design processes to compete for the chance to be the developers of a larger project. So you may get five teams of architects and give them specifics about the site and what kind of building they are building and other particulars and say, "Come up with a prototype in four days. Then we will judge who gets the contract that enables them to carry on." There may be more stages to it.

The idea was to use this to evaluate the problem-solving skills of different kinds of researchers. I'll cut to the chase. The finding here is interesting. They have people from straight disciplinary programs, completely interdisciplinary programs, and hybrid programs. The hybrid programs win hands-down.

Unfortunately, the researcher was a little

disappointed in this, because she was actually pretty committed to the all-interdisciplinary.

They had anthropologists doing ethnographic studies of these teams as they worked. They had various kinds of quantitative indicators across the board. The hybrid programs win.

The reason that they offer for this, which I find persuasive in this, is that you have to know something in some depth, as well as knowing how to relate to others who have different skills in some depth. You all sort of signal that at the beginning. What you know in depth doesn't have to be a discipline, but you have to know something in some degree of depth to be good at engaging in collective problem solving with people who have different skills in a division of labor.

I won't belabor the point. But just notice that we have a lot of variation there.

Let me move to wrapping up. I promised myself that I would not simply reproduce the standard

academic lecture, and it looks like I might.

There are a bunch of different agendas and ways in which interdisciplinary work gets organized when it is organized in relation to matters of public concern, social issues. There is a difference between what you might think of as project work – relatively short-term work that brings different researchers together around a specific problem, like when welfare reform was contemplated in the 1990s and lots of economists and lots of sociologists and lots of political scientists got involved in trying to grasp that, or mixed-income housing developments, or a variety of different sorts of issues like that. This usually doesn't transform the institutions. It usually doesn't create a new field. It may be highly energizing for the participants, but it's largely short-term.

Lots of funders love these programs, however. They are probably the most popular thing for funders, which is a minor problem for administrators

in universities because it means the funding follows the unpredictable fashions of these various short-term social problems rather than the building of the units the universities are working in. But they are a big deal.

A second kind of work is work that combines different disciplinary perspectives to address a topic that can be a more enduring focus of attention, like cities or urbanization, or media and communication – a topic which is not exactly a short-term problem, but is a topic that is understood enduringly to require different perspectives and to keep presenting a variety of opportunities for practical action, because it's tied to various sorts of issues, and often to actors, to the professionals involved. But although it's tied to professionals, I would suggest – and it may yet be the case that media and communication becomes simply a profession. I'm actually dubious on that front, for what it's worth. I think that there are a variety of different professional connections,

and it's not likely that there will be simply one profession called "communication." I think there are going to be a range of different career opportunities. There is going to be continued and growing demand, and it's not going to take just one form. But that's just my opinion.

What I want to suggest, though, is that sometimes there is a stronger link to professional practice, where professional practice comes in one clear, dominant model, especially where there is licensure linked to that, as in law or in medicine or some other fields where a very strong common curriculum exists across the range of professional schools because they have to meet various licensing requirements. These produce a different model.

I won't try to go into all this. What I want to do is fit that into just saying that there is this dialectic process that I referred to before of exploding boundaries and forming communities. We aren't very familiar with this, because we mostly

think of the story of higher education in the context of that story of growth I told earlier. That is, we think there is a continuous expansion, and during that expansion, various new things get created and the old ones hardly ever go away. Therefore, the story of the growth of the university is a proliferation, and you wind up with the conglomerate corporation.

It seems to me that that had enough truth for a little over 100 years that it became an automatic way of thinking. Yes, there were recessions. Yes, there were times when there were consolidations. Yes, there were some fundamental changes, like recasting library science as information science. But fundamentally there was a story of growth.

I'm not sure there is going to be a fundamental story of growth very long. It might be over. It might have actually ended several years ago and we just didn't notice it, because some individual institutions, including this one, are able to continue

to grow as part of their effort to move higher in the hierarchy of institutions. But in general it's not clear that the research university can continue to grow dramatically. It can continue to get better. It can continue to do new things, often by reorganizing the way it works. Hence, some of the demand for interdisciplinarity – explode some of the boundaries, rethink the way things work. But it is also always going to involve coming back together, regrouping, identifying common solidarities.

No one has hit on an ideal balance, and there might not be a steady-state, ideal balance. Almost everywhere disciplines are much more strongly institutionalized, not least because they control faculty lines and tenure decisions and parts of the publishing apparatus. But it's declining and it's changing, and it's going to change dramatically as the information-technology revolution undermines a variety of those structures of disciplinary control, including the publication system.

It changes as more and more Ph.D. students go to work outside academia. Therefore, academic training is not simply a reproduction of the professoriate.

It changes just because there is a dramatic economic recession going on, and it changes because we have reached something of a saturation point in parts of the population for higher education.

So interdisciplinary social science is a part of the story, a crucial part. Innovation is a part of the story, a crucial part. But the story ought to be, at least, not just a story of growth, not just a story of competition, but a story of trying to inform the public with necessary knowledge, recognizing that the public gets informed in different ways, through different media, through different kinds of intermediary groups, including professions and nongovernmental organizations and social movements and policy and regulatory bodies and business companies. There are a lot of different ways in which the public

gets informed. But the bills get paid because we inform the public. At least in the long run, I like to believe that's true. I like to believe you can't fool all the people all the time. I like to believe that we really do do that. The single biggest way we do it is actually through teaching. That is public communication. Students are the largest public most professors will ever reach, and a crucial public, and an intermediary to other publics, and the future state legislators that they were hoping they would be able to speak to, the future parents that they were hoping they would be able to speak to. So students are basic.

But the bottom line is that we ought to have a very strong commitment to informing the public. We ought not to think this is some externally imposed pressure – oh, the provost wants us to inform the public, the dean wants us to inform the public, the legislature wants it. But we ought to think of that as core to our purpose, why we became intellectuals,

why we want to be part of the university faculty. It's a strong feature. Imagine Hobbes and Locke or Weber and Durkheim or the great sociologists of the Chicago School if they hadn't been pursuing their work in order to inform the public, to change the state, to restructure the society, to help to ensure business. Imagine Adam Smith saying, "I just want to be an economist talking to other economists. I don't really want to have an impact. This thing about the invisible hand? It's just for specialists." Not likely.

Informing the public is why we're here. But don't short-circuit it by imagining that it's the same as popularity. It is about seriously researched knowledge. It is about the role of the researcher, correcting public perceptions, not just pandering to them. It is about working with professionals in a variety of different professions to enable them to do their publicly important work better, as well as informing and giving options and information to a

broader public discourse.

Thank you for inviting me here to talk.

ERNEST WILSON: Let's open it up for some questions. I'm going to call on my colleague Dean Knott to ask the first question. Then we'll open it up more broadly.

JACK KNOTT: I have really a two-part question. The first part is, there seems to me to be a big difference between where you have interdisciplinarity in the sense of integrating theory – for example, political economy or how psychology has become brain science, when chemistry and psychology come together – versus the kind of thing you are talking about, where you have several different disciplines sort of giving their angle or perspective on a problem. Those disciplines have actually come together to, in some sense, form a new discipline. That seems to me a very different kind of thing.

The second part of this is that it seems to

me that some of the biggest impact that social science has had on society is not necessarily where we are consciously trying to inform the public. Sometimes we do. We produce something, and we are trying to – but where we produce, over three, four, five, or ten years even, a set of findings about something that over time is taught to students, and these students get into positions of prominence. They eventually get into leadership positions. A good example of that is deregulation. The people writing initially about deregulation were economists. They weren't thinking of necessarily changing politics. But over several years, they discovered that deregulation was a drag on the economy and had very good evidence – I mean, regulation was a drag on the economy – and they produced a body of evidence to that effect, which led to – it wasn't like if you were a dean or a provost and you wanted to say, has this faculty member affected society this year? It's a long-term process.

So I'm interested in those two aspects of

interdisciplinarity and informing the public.

CRAIG CALHOUN: I'm going to break this into three parts, to answer your two-part question. I think all are really good points and really important, and things I skipped over fast.

I do think that there are processes of recombining and reforming fields and generating new disciplines, which appear as interdisciplinary work at a phase of the process and yield new disciplines, or, more often, interdisciplinary fields that get supported by centers that become strongly institutionalized within universities, or professions and professional schools. The underpinning of an interdisciplinary field that is on the way to a disciplinary identity of its own may be highly diverse, and the question is kind of open-ended and depends on institutional factors, as well as scientific success, whether it will go there. The neurosciences, cognitive sciences are a really good example of that. I think the jury is out, but they

could very well wind up being a new discipline.

I don't think that's automatic, though. I think in that case we could also have compelling counterarguments and speculation about the ways in which that will turn out to be a technique, like quantification, that gets claimed by a lot of disciplines and harnessed to different disciplinary problems so that, really, people doing neuroeconomics – there are people doing neuroeconomics – will not remain enduringly tied to biological sciences and become part of the common field; they will have added a tool to their toolkit as economists, in many cases.

I think in some other cases a new field really gets formed. It's not predetermined. A strong example of that would be something like computational biology, formed in the marriage, especially, of computer scientists and biologists and a few others in various cases, in response to the challenge of analyzing the human genome. There you really have a

variety of people coming together and forming a new field, which grants its own Ph.D.s and becomes pretty autonomous and self-organizing, although within the realm of the biological sciences pretty broadly. It doesn't become a part of computer science, even though lots of computer scientists work in it. It becomes a part of biology.

Biology is an interesting case. It would have lots of time in the story, the narrative, because it's huge. It makes economics, the biggest of the social sciences, look like a tiny little field. It's enormous. The majority of biologists at almost every university – I haven't checked this for USC; I don't know if it's true here – are not in the biology department. They are in the medical school, in research institutes. They are working full-time as researchers, even if they have faculty titles. There are lots of them at every research university, working on cancer research, working on this and that.

There is a recurrent dialectic in biology

that is just like what I described overall, in which there is a breaking-apart and a pulling-back-together. Every now and then, there is a movement to reunify biology. Actually, there are people who think computational biology will be such a movement; it will unify everybody again. There have been people who have thought that for other agendas in biology – evolutionary theory, most prominently.

There are moments – I don't know if it ever happened here; I don't remember, actually, from when I was here what there was in this – the big recent example was essentially the elimination of separate zoology and botany departments in favor of common biology departments all around the country. So there is this sort of amalgamation and restructuring kind of thing that goes on.

The underlying point – and you are right to point it out – isn't simply the production of things that always stay interdisciplinary. It is exploding boundaries, recombining, and being open to that. The

problem – this goes back to the core interest in innovation – is that universities aren't good at staying open. They are not terrible. We are actually a pretty innovative institution, as social institutions go. But we also have very strong investments in things like disciplines and in traditions. We raise money from alumni, and they don't like it when you eliminate the department they got their major in and so forth and so on. So there are a lot of vested interests that make it hard to do this.

In a time when you are growing, it's really easy to say, "Let the anthropology department just shrink. We won't eliminate it, but we will add these new cool things that we do over here." In a time when you are not growing, when the budgets aren't growing, that's tougher, and you get a lot more structural change.

A second thing you said that I think is really important is that there is an influence, over a

long duration, through teaching that is often not intended as a conscious influence. I'm going to claim that your example is a bad one in just a moment, but I'm going to agree with the premise. It's absolutely true, and it's true of this example – and in this sense, you are absolutely right about deregulation – that it's often a reframing of how people think rather than a particular policy intervention. Over a very long period, there may be a shift in the undergraduate curriculum. There are lots of sort of broad kinds of shifts – less Western civilization, more world civilization; different teaching around identity politics, groups, all sorts of things like this – that change the general way people come out of that. I think deregulation is an issue. So I think these *longue durée* – through teaching.

I do think that often the teachers who are doing them think that they matter. I want to stick to my sort of core point, which is actually that we are doing this because we think it matters. We think we

are conveying necessary knowledge, and we ought to think we are conveying necessary knowledge. So the people who are working on this, who have the new ideas, who are saying, "You know, regulation is counterproductive. It creates transaction costs that are in excess of the benefits," think that that is an important thing for their students to know. So it's not completely different from that intervention.

In that particular case, I think that this is tied to a genuine *longue durée*, as you suggest, a long-term process that is a very self-conscious process of an academic intervention in creating public knowledge, which some people will agree with and some won't, which is a sort of movement centered on rethinking from the point of view of the private that is tied to followers of Hayek, to Chicago School economists, to a variety of others, who are aware that it is a movement to suggest that society ought to change. It gets support from the Olin Foundation and other sorts of actors. But even before it has

foundation money, it has networks of people who are organized, followers of Hayek and so forth, who are encouraging the idea that various versions of the private, centered on the individual and on private practice, are normal and natural, and the public is somehow something added on to that, in one way or another. They are followers of the famous Bentham line about "the community is just the sum of its members." So it becomes more and more natural to see things from the point of view of the private.

You get a transformation of economics, which, among other things, recasts the discipline up from the micro, so that, almost universally, economics comes to be taught as upward from microeconomics.

That's a straightforward intellectual problem. I don't have the competency to say that's better or worse. But it changes the place of macro policy.

Right now, actually, you have a variety of people saying, "Wait a minute. We have to pay more

attention to macro policy," in external contexts, and it may have an impact on the curricula.

So what I want to suggest is that we shouldn't discount the idea that these long-term changes are sometimes – not always; partly I agree with you completely – sometimes they really are a part of a sort of collective action, and there are people thinking, "If we change what we teach, if we change how we do research, if we have the right theories" – the people who did this were not cynical. They were people who genuinely believed that this was the right way to think about it. They were promoting what they saw as necessary knowledge. They thought it was a mistake that people were failing to recognize the ways in which regulation was a drag on the economy, from their point of view. It's evidence, I think, of the impact of higher education, that it would have such a huge impact.

Mostly we agree, but I do want to say that there are these extra-academic movements.

I took a long time answering that. I apologize.

QUESTION: I was just curious. From a different perspective, if I'm focusing on the word "sustainability" of innovation, I'm interested in the signals institutions send to incent and disincent innovation. You mentioned a few of those in terms of how academics are in disciplines that reward them through their disciplines. But if we are going to take on sustainability, what is it in the institutions of academia that incents innovations, and what are those incredible barriers that have to be attacked?

And do you have police protection when you give these speeches around academic institutions?

CRAIG CALHOUN: I'm assuming that at USC it's safe, and that at Chicago it would be even safer. But if I went to give this speech in some other places, I would hire guards, yes.

A really short version of that: Yes, there's an incentive structure. Of course it's not

that everybody is simply an altruist in this model. The incentives for content change are large. We are full of incentives for new ideas – successful publication, people citing your work. There are lots of incentive structures there.

The incentive structures for innovation are often real. They are often not taken up. That is, deans and others give incentives that faculty don't take up.

So it's exactly the right question to ask: What are the disincentives? What are the investments that are at issue? I think some of them are cultural, social, psychological. They are people's lifelong investment. What made the work they were doing important to them was, in part, the way it was organized and what they went in it for, and these seem like threatening external pressures.

But there are also disincentives structured into the institutions, in terms of what will take more and less work sometimes for faculty, in terms of the

fact that every one of these is potentially a shift in the balance of power among different faculty members in the institution. There will be winners and losers in every one of these changes, and we delude ourselves if we think that they ever happen without having winners and losers. Therefore, it is always, no matter how neutral and fair the dean, a backing of certain people's vision more than other people's vision.

There will be resistance. It's linked to things like what they think will be their prospects for students and for their students' success in the future – like progeny, in many ways. This is there.

It's linked to the arenas in which they have recognition, because recognition is a very powerful coin of the realm in academia. Yes, money matters, but, boy, recognition sure matters a lot, too, partly because there isn't that much money. The recognition is very field-specific for most people. If you start changing the definitions of the fields, you are

changing that recognition structure about who they are. And that makes people nervous.

QUESTION: I would like to thank Dean Knott and also Dean Wilson for bringing this gathering together, and especially starting this series with such an important, in my mind, subject and having as distinguished a guest as Professor Calhoun.

I want to share with you first my practical experience. I am a planner and a developer. I develop sustainable communities. In practice, one of the common definitions of sustainability in building communities is being sensitive to the economic, social, and environmental impacts of our decisions. In practice, what we have found is that this is a very, very difficult task, to have communications between all of the stakeholders – the business community, the government, the academics, the civic organizations. Partially, it can be attributed to our educational system, which is these specialized groups of people that focus – and this is a very serious

issue. We see this all the time.

Also, partially, since we are in a school of communications here today, it's because of our media and the stereotyping practices that are very common in our media. You rarely ever see a developer in a movie or in the news that is a good person, not profit-driven. You rarely ever see an environmentalist who is not necessarily a leftist and a tree hugger.

How do we correct this? I think it's a very sensitive time right now. I don't think this is something where we can wait for decades to see what happens with incremental changes. I really believe that if we really want future communities to be sustainable and serve the communities, there has to be some change.

So the question is, how do we promote that change in our media and so on?

CRAIG CALHOUN: It's an absolutely superb question, and a huge one. I'm going to try to just do a little bit in response.

I think it is a critical question. It's critical because that specific issue about the relationship between environmental and other concerns is crucial, but also because the issue of different timeframes is a very big issue in relating academic, research-based knowledge to broader publics. Academics typically work on longer timeframes than practical action. We need both. This is a both/and case. That is, we need people working on different types – we need people doing practical action on timeframes that academics cannot do research on. We need academics ready to provide knowledge they have in support of and help to that practical action immediately, and we need academics doing longer-term research to work on more basic understanding, more basic knowledge in all of this. That goes for the media part. It actually goes for the environmental part and the economic part and so forth.

It's very unlikely in a case like this that academics are going to, by themselves, play the

transformative role and change the way the media works on this. I think academics can play an important role in reporting, analyzing, discussing, changing their teaching. This can be one of those things, like what Jack referred to, where changing teaching over time can influence the way in which journalists look self-critically at the way in which they report and cover certain sorts of stories, and so there can be an influence.

That's not going to change things overnight. That's going to have a long-term effect, if it has an effect.

There can be interventions into the public sphere to talk about this. I have to admit that I think it will have a modest effect. It will not transform that, because the reasons for the impulse to stereotype are so strong and the influence of academic work is not, in the short run, equally strong.

But I do think that an important thing to say here is that part of the role of the academics,

when I talk about reaching out, is what I would, for want of a better phrase, call "knowledge mobilization." It is mobilizing the knowledge we already have in support of and assisting actors who are engaged in very short-term and immediate practical activity. We already have a lot of knowledge. If we increase the amount of knowledge in the world, that's terrific. But most of what we know next week and next year will still be what we know now. We have to ask how we get what we know now out. We have to preserve it, we have to reproduce it, we have to build it, but we also have to get it out.

That is, I think, the best sort of answer I can give, though it's a really inadequate one, and I apologize for that.

ERNEST WILSON: I want to get a question from this side of the room also, if there are students who might have a question.

QUESTION: I have a question. I'm a student.

The context of what you are talking about is innovative in itself. Usually information is trickled down from the top. Since we are getting this information now, people like me, I want to know, in terms of our world view, how we get this message across, as students, to the rest of the world. It's good to have this information and it's good to have the urgency in my ear now, but how do I take this message across? I can set up clubs and I can set up organizations. But how do I tailor that to a less privileged -

CRAIG CALHOUN: The first part of the answer is, I agree, it is absolutely important that students be partners in this whole discussion, not merely recipients of it somewhere down the road. I think that students are communicators outward from the university and as important as faculty in that. Students will, while they are still students and after they graduate, have a range of ties to other constituencies outside the university and are,

therefore, a very important part of the communication process in this.

You talk about, for example, reaching low-income communities with parts of this. There are a variety of different scales. There are a variety of action research opportunities. There are organizations working on various issues, whether it's the issue of low-income housing or mixed-income housing or it's an issue about the media and representation in the media, the nature of coverage in different areas or issues. Those organizations can benefit from knowledge.

That doesn't just mean you go to work for them and become a permanent worker. It means you become a connector of them to where they can find the knowledge: "This professor can help you." "If you read this, it will work." "I can arrange for there to be an intern."

There are a lot of different ways in which knowledge gets out in that case.

My sense is that, by and large, we have a very poor representation of how others can access the knowledge that's in universities. We have lots and lots of knowledge. It's really important, and we really do know a lot of stuff. But we don't have a really accessible sort of "portalization" of the university for finding that.

I think students can be a significant help in pointing to where there is that useful knowledge, as they are working, for example, in social-movement organizations on one or another issue, whether the Save Darfur Coalition or whatever kind of organization. What's helpful? Where does knowledge come into that?

Beyond that, I think one of the big changes that's going on in learning – and it has just started, but it's going to keep changing – is the recognition that learning is a creative activity, not a passive reception. People build Web sites as a part of their coursework and they engage in communication as a part

of their coursework. That can very directly reach people in these other constituencies.

ERNEST WILSON: Let me give you one quick example. I discovered recently that we have a lot of wonderful meetings in this room – great scholars and intellectuals, like Craig Calhoun. We have practitioners come in. We record these things. It costs us more than I knew it was costing us to record these things.

But what do we do with it? In the traditional way, we take it and we think we are being modern, so we put it on DVDs, which is pretty cool. Then maybe three or four people look at the DVD. Then what do we do with the rest of the DVDs? We put them in plastic boxes and put them on a shelf. We don't catalogue them, and nobody sees it.

In response to your question, and what Craig has been talking about in terms of useful knowledge – how do we communicate the knowledge that may be useful? What we are discovering as a faculty is, why

don't we take all of these recordings and put them up on YouTube? So it's not just 35 people -

CRAIG CALHOUN: You didn't get me to sign a release. (Laughter)

ERNEST WILSON: We're learning through practice how to do this.

But I think that's a perfect example of the way that institutions have to learn. In fact, the issue of intellectual property rights comes in. How should we record it? Should we record everything? Should we do it with video or audio?

So these are questions that are very much works in progress.

CRAIG CALHOUN: Absolutely. And if you believe the public knowledge, you ought to be really concerned about fair use, the support of fair-use doctrines, the way in which the discussion of how things can be reproduced from scholarly knowledge is played out. It shouldn't be entirely controlled as an intellectual property right all the time. These are

things that are completely open for everybody to get engaged with.

ERNEST WILSON: Let me take this opportunity, first of all, to thank my colleagues, who have come all the way from SPPD to join us here. I want to thank Dennis Holt for making all of this possible. I see a colleague from beyond the university, who has come in to join us, and especially to the students who are here. This is a launch. Please come to our subsequent events as well.

Let's give the inventory of necessary knowledge and our great guest, Craig Calhoun, a round of applause.

CRAIG CALHOUN: Thank you all.