Report on the 64th Economic History Association Meeting
By Steven Nafziger, Yale, and Michael Haupert, UW La Crosse

(San Jose) The 64th annual meeting of the Economic History Association took place September 10-12, 2004 at the Fairmont Hotel in beautiful San Jose, California. The theme of the meeting was “Technological Change and Economic Growth in History” and was presided over by outgoing president Joel Mokyr (Northwestern). As has become the custom of the EHA, Friday morning was given over to workshops and local tours. This year’s workshops covered publishing and job market tips. For those more inclined toward easing into the conference, there was a local tour of arts and technology highlights or for the truly spontaneous, a magical mystery tour.

After the preliminaries, the conference kicked off on Friday afternoon with concurrent sessions. “Location, Location, Location: The Geography of Invention and Innovation,” was chaired by Brian Wright (Berkeley). Dee Sutthiphaisal (McGill) opened the conference with “The Geography of Invention, High- and Low-Technology Industries: Evidence from the Second Industrial Revolution.” She asks if production leads to more invention and if clustering in production results in more inventive activity in that industry. She attempts to answer these questions by exploring the geographic patterns of invention in the shoe, textile, and electrical industries in the US during the Second Industrial Revolution. In general, Sutthiphaisal finds that the location of invention does not appear to be closely related to the location of production. The implication of her results is that because the rents to scarce human capital associated with inventors are high, they tend to migrate to those areas where demand and support for R&D are highest. This historical evidence appears to suggest that invention and production might not be clustered in the same location. This may be unwelcome news for developing countries that hope to emerge as centers of invention after having attracted shifts in manufacturing capacity from developed countries.

Discussant Jeffrey Furman (Boston University) confessed that he had never been to the EHA meetings before and was impressed at the data (Continued on page 15)
Executive Director's Notes

Greetings Gentle Members:

Usually, in my first letter of the year, I nag you about renewing your membership. I am not going to do that this year. Just consider yourselves nagged, and get those renewal forms in! Rather, I thought I would share with you some of the mail I have received here at the Clio Home Office. Since I handle this correspondence on your behalf, I felt that you should be a party to it. Here is a, not particularly random, sample.

Dear Clio,
I am a Professor of Philosophy at an elite northeastern university, which I realize for most of your readers must seem like a redundancy. In any case, my problem is this -- I am in love with a Cliometrician, but I don't know how to tell her. Every time I try to approach her and communicate my affections, I get all tongue-tied and say things like, "Wittgenstein didn't mean 'pictures' literally!" I've just about given up hope. My final thought is to send her candy and flowers with a note explaining how I feel. What do you think?
Signed,
Looking for Love but Kant Find It

Dear Kant Find It,

As Popper was fond of saying (or at least he should have been), there are three nevers in life: Never fight a land war is Asia. Never make the first or third out of the inning at third base. And never ever send an academician, regardless of gender, candy and flowers. Even if your Juliet appreciates the thought, even if she secretly enjoys receiving candy and flowers, were you to send such delicacies, her cynical, romance-impaired colleagues would make life so miserable for her that you will most likely damage beyond repair any hope of establishing a relationship. What to do, then? Your Cuddlywuddly is a Cliometrician, right? Instead of the candy and flowers, send her data, lots and lots of data, the older the better.

Dear Clio,

Some time ago while on a business trip for my firm (a large software supplier), I was staying in a hotel that was hosting a conference of scholars who called themselves "Cliomsomethings." (I don't remember the exact name.) Anyway, one night a group of these Cliomelicians was in the hotel bar, and I joined their party. Among this group, I met the most wonderful man I've ever known. Indeed, the man of my dreams. He was manly (in a sensitive, scholarly sort of way) and athletic, with black hair. Oh, I could go on, but to make a long story short (and to keep this rated
PG!!!), we had a wonderful weekend together, which I hoped would last a lifetime. Alas, the conference ended, and we parted without exchanging particulars. The only information I have about Mr. Mysteriously Wonderful is that in the bar, his colleagues referred to him as "Lee." Please help me find him!
Signed,
Head Over Heels for Clobubblicians (or whatever)

Dear Head Over Heels,
Uhh, you're looking for "Lee" Alston. His phone number is (303) 492-4257. Call him now!

Dear Cléo,
I am an undergraduate searching for a major. I took Professor (deleted)'s principles of economics course, and I really liked it. I want to study more economics, but my parents don't think it is a good career choice. My dad keeps asking me, "But what does an economist do?" And to tell you the truth, even if I could answer that, I am just not sure I want to be an economist. How can I tell if I'm cut out for it? What kind of economist would I be? Should I consider another major that's like, you know, economics, only more marketable? I'm so confused. I just don't know what to do. Please help. Any advice would be appreciated.
Signed,
Perplexed in Late Adolescence

Dear Perplexed,
Relax. You're normal. (That's good, right?) All of us had to face the "What do I want to be?" question, and most of us those who end up in economics arrived from some other discipline. (After all, very few kids go around telling their friends, "When I grow up, I want to be a baseball player, a pediatrician, or an economist.") As for what "type" of economist you might be, there are in fact three kinds of economists. One is the kind that really wanted to be a mathematician but wasn't smart enough. A second is the kind that really wanted to be an engineer but was too smart. The third is the kind that really wanted to be a historian, but realized one could make 32.8% more money in economics than history. So which one of these are you? If your answer is "None of the above," then perhaps you should consider pre-Vet.
An Interview with Jan de Vries

Jan de Vries is Sidney Hellman Ehrman Professor of History and Economics at the University of California, Berkeley, where he has served as Chair of the History Department, Dean of Social Sciences, and (currently) Vice Provost for Academic Affairs and Faculty Welfare. His research interests in economic history have ranged from European agrarian history to historical demography and urbanization, to environmental and climate history, and, most recently, the history of consumer behavior. He has written 5 books, 63 published articles and book chapters, and 45 book reviews. In addition, he is co-editor of 3 books. De Vries is a past president of the Economic History Association and has served as editor of the Journal of Economic History, 1998-2002. He is the recipient of the Woodrow Wilson and Guggenheim fellowships, among others; has been awarded grants from NSF and NIH; and has held visiting fellowships to the Netherlands Institute for Advanced Study, the Getty Center for the History of Art and the Humanities, and All Souls College, Oxford. He has been elected to membership in the American Academy of Arts and Sciences, the British Academy, and the Royal Netherlands Academy of Sciences. He was elected to the American Philosophical Society in 2002. He is the 2000 recipient of the A. H. Heineken Prize in History. Alan M. Taylor is Professor of Economics and Chancellor's Fellow at the University of California, Davis. He conducted this interview with Jan De Vries in person on the afternoon of May 12, 2004 at Jan's office in California Hall at the University of California, Berkeley.

The Cliometric Society Newsletter interviews traditionally begin at the beginning and try to find out how things got started in your career and your interests. So, when did you first become interested in the study of economic history and, more specifically, the study of history?

I had some special interest in history as long as I can remember. Certainly in high school it was a subject that gave me more pleasure than any of the others, even though I don’t think I did better in it than most of my other courses. But when I began college, I didn’t think I would major in history. I thought contemporary society was somehow more important than history and that I should major in political science. At some point after having taken both history and political science courses, I concluded that the most valuable and enduring part of the political science that I was learning was really history and that the “scientific” part of political science was not very impressive. So I decided I better do the real thing and become a history major. However, at the same time, I became more interested in the economics, what we’d call political economy today. It was all somehow wrapped up in politics, the intersection of economics and politics and historical settings, so I gravitated to that area as an undergraduate.

Were there any particular teachers who most influenced you at Columbia?

Well, the new economic history certainly hadn’t reached Columbia when I was an undergraduate. I had courses in American economic history with a sort of relic of the New Deal named Louis Hacker who was really a marvelous teacher. I called him a
relic, but I should speak more respectfully of him, because I thought he was a good teacher and I learned a lot from him. But I didn’t get a clue as to what was going on in the field professionally, although I did get a good background in the historiography of the old economic history as it had developed during his career. Hacker was probably about at retirement age when I studied under him. And, I studied European economic history with Robert Lekachman, who was also a product of the New Deal Era. His own academic work was more in the area of history of economic thought. When I took an undergraduate course from him, Charles Kindleberger’s book Economic Growth of England and France, 1850-1950 had just come out, and he was much taken by it. He abandoned the course organization that he had in mind and taught this book for several weeks. This was perhaps the first kind of relatively modern piece of economic history that I had been exposed to, and I enjoyed that book. I remember learning a lot from Lekachman, particularly via Kindleberger.

So those are the people I worked with in economic history, although more broadly in history, I did a senior thesis under Richard Hofstadter. He had written disparagingly of populism, and coming from the Midwest, I thought populism had gotten a bum wrap in his work. He saw it as an example of anti-intellectualism in American life, the title of one of his books. I was selected to write a senior thesis. Only a couple of majors were allowed to do that, so it was a great honor. I wrote about 150 or 200 pages on Midwestern agrarian radicalism in the 1920s and 1930s, which was an example of studying the interaction of economics and politics in a historical context.

Already we’ve gotten a sense of certain historical problems with overlap into other fields that were fascinating to you. Was it already clear at this point that you were going to be drawn into economic history, and how soon did you realize that you wanted to pursue a Ph.D? How do we get from there to your decision to go to Yale?

When I entered college, coming from the humble background that I do, my intellectual aspirations were set by my high school teachers, and becoming a high school teacher was probably the career that I thought about if I thought about it at all. And then later on, it was my college teachers who were an example to me, so I thought I would go into higher education, which would, of course, mean graduate school. I don’t think I had any firm plans in mind, however, until I actually had application forms in front of me when I was a senior in college and described my interests as economic history. Why I did that rather than something else, I don’t know. I can’t think of an “eureka” moment when it crystallized in my mind.

In those years, Yale produced a great crop of Ph.D.s in economic history. What were the key ingredients in that successful run?

I think that you should point to the qualities of mind of the people who were teaching in the program. They were all different and not particularly friendly with each other. It’s not like they formed a school or anything like that, but they were all in their own right simply very good at what they did. And they managed to attract good students. The program was not elaborate; it was a bunch of courses you had to take. I don’t think we formed a tight knit group, because we were busily engaged with other students in history and economics in those two graduate programs. I think it’s more in retrospect that it was a kind of shining moment than it was at the time.
What were the big debates in economic history at that time, methodologically and in terms of subject? And how did they influence your approach to the subject. What particularly grabbed you or struck you?

I have to give two answers to that, one as an economist and one as an historian. When I was with the economists and with the students working with Bill Parker, it was the Parker-Gallman sample, the work on the southern economy, the slavery issue, all those classical foundational texts of the new economic history that were very fresh in everyone’s mind and were active products of research. Everyone in cliometrics is familiar with this, so I don’t need to belabor the point. This is what we were all talking about. Fogel had just written his railroad book — the counterfactual was on the table. I remember the summer after my first year of graduate school, Parker hired me as a research assistant to work in Washington DC in the Department of Agriculture archives to research a very specific topic that Doug North had identified as the key factor of the dynamic of intersectoral trade in the antebellum United States. Gavin Wright had been sent to North Carolina to work with Gallman, others were working on different aspects of different commodities and trade and the role of slavery in the production of these commodities. I was assigned the task of estimating how much pork might have been produced in the United States to determine whether the South could have been self sufficient in satisfying the demand for pork, which was a very large part of the slave diet as it was of everyone’s diet at that time. So that was one big issue.

As a historian, it was Europe that was the interesting subject, not the United States, and it was the work of the Annales School historians, who were engaged in doing large-scale regional studies of agrarian society, which seemed like the most exciting and innovative kind of historical research that was then available. Those are the two things that were very much on my mind as a first-year graduate student.

I want to go back to what you were just saying about the National Archives. You went to look at the dynamics of intersectoral trade in the antebellum US. You brought home the bacon on the project. You were thinking about intersectoral relationships in a pre-modern economy. Something similar seems to come out in your first book, The Dutch Rural Economy in the Golden Age. We have the peasant model, the specialization model. You looked at a different pre-modern economy and emphasized that, driven by exogenous demographic and other shocks, internal trade and specialization played a role. There’s a little bit of a connection there starting with your first research project in the Archives. So, when you look back on that first work, what influences has it had? Do you feel that your view has prevailed?

There are a couple of things that come to mind in response to your statement. One is that I don’t know how conscious I was about this when I began. By the time I finished the dissertation, I think I could explain it to myself and others as an effort to bring together some of the rigor of the new economic history with the broad approach of the Annales. What I didn’t like about the Annales School, what I learned to dislike about it or to distrust about it given my training as an economist, was its impressionistic and untestable character. There were real methodological advances there for a historian, but they weren’t necessarily the methodological advances that...
would impress a new economic historian. I felt like I ought to be able to somehow repair that. What I like about the Annales School, and what I learned to criticize in the new economic history from a relatively early date, was an appreciation that those methods we learned allowed us to give powerful answers to small questions. We could test sectors. I could answer a question about pork production, or I could answer questions about the profitability of a crop or of a plantation of a certain size. But these all seemed like small questions relative to the total approach of the Annalesites, what they called the *histoire totale*, and I like the idea of painting on a broad canvas. Thus, it was an intermingling of these two traditions that I was trying to bring to bear on my dissertation topic.

Now, regarding that dissertation and the book that came out of it in 1974, it was certainly very respectfully received in Holland and in Europe. But, I think what struck me more than the respectful reception was the silence. It took them a while to figure out what it was all about and whether it was a serious contribution relative to the very archive intensive, regional historical monographs that were being produced in Holland and elsewhere in Europe at the time. The economic architecture of it was not understood by most readers at first. A discussion about that book took nearly a decade to begin, which is strange to an economist. An intense debate didn’t arise until well into the 1980s. I guess the half life of historians’ work is longer than that of other social scientists. Just a few years ago, I wrote a piece defending my work against critics. That was 20-25 years after the publication of the book. So that tells you something about the long lag that characterized what I’ll call the critical reception of the book. Today, the book remains a required piece of reading, so I’m very happy and proud about that; but I think in its first ten years it was not. It’s a book whose place in historiography took some time to be achieved, at least in Europe.

I was definitely struck by your interdisciplinary interests. Your perspective was very macro and embraced institutional questions. Certainly those are now much more a part of the new economic history than they were in the early 1970s. What would you like modern scholars to take away from your book?

What I really wanted to shed light on was not exchange and commerce but production. Technology and productivity, the organization of production, needed to be emphasized in part because the early modern period had so often been characterized as merely commercial. There was a commercial revolution, and that’s a big deal, of course, but it was only a commercial revolution. The changes in production would have to wait for a later time. It seemed to me that, particularly in the agrarian economy, there were major changes in both the techniques and the organization of production that really needed to be emphasized, so merchants don’t play much of a role in that work. You won’t find me referring to commerce except to describe commercial incentives, the way peasant producers respond to them, and how commercial organization became more developed in interaction with an expansion of production and of demand. I was focusing on supply and demand. The commercial role in between wasn’t my chief source of concern. I neglected it, taking it for granted.

As you said, we don’t wish to deny the supreme importance of shipping and commerce in the Dutch economy but want to place it in the context of the whole economy.
That was the goal. It remains true that as I’ve chosen research topics since then, I haven’t usually focused on the role of merchants as a group, let alone of individual merchants. I’ve never been too interested in studying at that kind of micro level. However, the project that I’ve spent some time on these last ten years has been very much focused on commerce, and that is intercontinental trade. Now that somehow seems like a very important subject, but I don’t see it as making a statement about what makes the economy tick. It’s more a question of shifting the focus to one of the constituent elements of the early modern economy. I don’t want to make big claims for the primacy of this, that, or the other thing.

Let’s talk a little bit about your book *The Economy of Europe in an Age of Crisis*. You begin in the preface by almost apologizing for writing such a broad book while still such a young scholar. Was it advisable? Would you do it again? Would you advise a scholar today to attempt such a course?

Well, I’d say I was very lucky. I’m not sure how I would advise others based on my own experience. All I can say is that I think having had the opportunity to write that book and the time to write it at that stage in my career was a stroke of good fortune, because the book was well received and successful and was widely adopted. In fact, it’s still in print and still being used, so I can say that it did my career only good. Looking back, I’m kind of surprised that I was able to write it at that time, because the invitation to do so came when I hadn’t even submitted my revised dissertation to the publisher. I was visiting for a semester at Yale in 1972. Bill Parker was on leave, and I was teaching his graduate course that semester. It was the only course I had to teach, and I didn’t have many administrative duties in the department. So, I had quite a bit of time to work on this book, which I had been invited to write by Harry Miskimin as part of a series of small books covering European economic history. Harry had already written a volume, and Robert Lopez was finishing another. To be invited to join these Yale economic historians was an honor I couldn’t refuse. So I said I’d do it, and I sat down and worked hard and within two years had finished the project. And as I said, the book was well received, otherwise it wouldn’t have been the right thing to do at that stage of my career.

You wanted the book to fill a void between the expansive treatments of the medieval period and the Industrial Revolution. I think it succeeded in that respect. I guess you’d agree with that. But if you had to write a new edition today, how would it change?

I did give some thought to writing a new edition. I still might do it. I taught a seminar about five years ago, and every week we’d have a theme and I would assign one of the chapters of the *Age of Crisis* together with other, more modern, works on that topic, whether it was trade or agriculture or industry or all the different topics that we dealt with. In a way I was using the students as guinea pigs to focus on the subject of how I might revise the book in the light of 25 years of very active research on most of these themes. The surprising part at the end of that semester was that the general consensus was the book seemed to hold up pretty well and that it wasn’t an antique or a fossil that no longer could speak to modern concerns about the economy of that period. So that’s the good news. The ways I would revise it, I think, are all pretty subtle. In every area, there’s been research done that allows us to have a more sophisticated look at some of these topics and to make them more complex.
but not necessarily to change the agenda or to change the basic questions asked. We've done a lot more research on the demand side now, and, of course, that interests me. I would certainly amplify on that more and emphasize it more. At the time, I thought intercontinental trade was a very marginal phenomenon, and I said very little about it. I would say a lot more about it today because of the way it altered the material culture of Europe in the century after 1650. I don't think that comes out nearly the way it should in the original book. The agricultural part was the one I wrote with greatest confidence, because I'd been working in that area immediately before writing the book. That too I would organize differently. But these are subsidiary issues. The overall architecture of the book, I think, wouldn't change too much.

Trade was still very dynamic in that era but was starting to be tempered by mercantilism, and I wonder how important you think mercantilism as a theme is. Also, what about the new force, which is capitalism, financial markets, accumulation, investment by firms, intermediation by banks, the role of the fiscal state, and saving by the middle classes? The evidence that the financial revolution, so to speak, had mattered for growth remains elusive evidence. I wonder what your take is on those two fronts: mercantilism and financial revolutions.

I must say I've always found mercantilism to be a difficult concept. That's partly because of my involvement in Dutch economic history, where the concept doesn't seem to fit, and there isn't a well-founded historiographical position on how to deal with it. The Dutch economy seems to be the victim of the mercantilism of other states. Does that mean the Dutch were anti-mercantilists? They had strategic trade policies that can be described as mercantilist, but then you begin to ask yourself what this concept of mercantilism actually means. I still remember that when the publisher sent my book to readers, the most frequent comment was there wasn't enough about mercantilism and one simply couldn't have a book on this subject that treated mercantilism in such a fleeting and marginal way. Consequently, I beefed up the subject more than I would have wanted based on my own thinking. You might say my mature view is that trade policy is more important than I thought it was back in the 1970s and that I would emphasize it as we did in the relevant chapters in The First Modern Economy.

Finance is also something I wanted to downplay in the Age of Crisis book. I don't know if I can quote myself accurately here, but I believe that I introduced the chapter on finance by saying that there are economists who think of this as a veil of money and not of fundamental importance. Whether I said it or not, I was associating myself with that position, meaning that I was obliged to say something about the subject. That isn't to say that it wasn't an important subject, but in general, it was not fruitful to look at everything through the prism of finance. After working on The First Modern Economy, there were issues regarding financial policy, tax policy, the development of public credit, and the development of private financial markets which strike me as key achievements of the Dutch. You know, it's been such a fruitful source of research in the last ten or fifteen years, which makes it a much more important subject in my mind. But I share your view that there's still something elusive about it. I don't think we have a good answer to just why it works in some areas and not in others. I don't think one could write a coherent, early modern economic history of Europe without
spending a lot of time on the development of financial institutions. I think the relative position of England, France, Holland, and Spain is all wrapped up in this. Whether this is where you should start, or if there are other factors that feed into the success or lack thereof of financial markets, I’m not sure. But you have to touch that base as you go around the diamond.

I want to turn to *The First Modern Economy*. A number of overarching questions come to mind. A question that is left at the end is the old question about “Why England? Why not the Dutch?” Some discussion of causality and path dependence focusing back on this sort of “path not taken” idea and also drawing a sharp line between economic modernization on the one hand and industrialization and the Industrial Revolution on the other. It seems to warrant much repetition for economists as well as for everyone else. You can situate the Dutch economy in its own historical space and then move to the French Revolution or the British Industrial Revolution. That seems like a very important point. I wonder what you think the reception has been given to these ideas both in the Netherlands and elsewhere?

I appreciate your summary, because I think that is what I would like people to focus on as one of the big messages of the book. We were trying to position the Dutch case in Europe and the European example in world economic history. The reception hasn’t focused on this much, at least not to my satisfaction. I’m not sure whether it was an error or not to name the book *The First Modern Economy*. Most people who grappled with it have looked at that title and read modern to say modernity and then proceeded to interpret the claim to modernity as a provocation, which isn’t really what we wanted to talk about or even where we had a well-developed, distinct position. So instead of being seen as a contribution to comparative history, it’s been seen as an assertion of exceptionality. In fact, its argument was anti-exceptionality, but particularly the Dutch reception to the book and the arguments and debates generated after its publication have focused on this. What we are trying to do is establish a basis for a more comprehensive view of economic development than one that is completely industry focused, and I can’t say that’s happened.

Instead of focusing on what the book is not, let’s focus on what it is and some of the lessons we should take from it. Not to risk offending you by using the term modern, but modern economies are not supposed to go into decline. Larry Summers once talked of developing countries as getting onto the “escalator of modern economic growth” – an image of continuous or at least unidirectional ascent. Now the Dutch experience is interesting precisely because it stagnated and went into relative decline. Your work must invite endless questions about what this teaches us about post-industrial 2004. So what does it teach us?

Hardly anyone who tries to deal with the concept of modern economic growth has read it, because it’s not very prominently placed, but in my article, “Economic Growth before and after the Industrial Revolution: a Modest Proposal,” I critique the Kuznetsian vision of modern economic growth as a distinct entity with world historical characteristics. I attempt to argue against it with a reformulation of the concept of modern historical growth in a broad historical context. It embraces long cycles of economic performance in which growth, indeed, is not unlike being on an escalator,
and all the terms that were used in descriptions of what's distinctive about the modern industrial economy apply. But it also allows for the interplay of declining, as well as increasing, returns in an economy. So instead of going through successive and discrete stages of a Malthusian world, before the Industrial Revolution, followed by modern economic growth, continuous output growth, thereafter, it would seem to me that most economies have a mixture of increasing, constant, and declining return sectors and the relative mix can change over time depending on their ability to appropriate knowledge or technology, as well as their ability to position themselves sometimes for ecological and geographical reasons to their advantage or disadvantage. It's in this broader context, which is part of the Annales tradition in the back of my mind, that I'm trying to introduce some flexibility into this concept of modern growth. There was economic growth before and after the Industrial Revolution, and decline is part of both.

I'm going to turn back to some of the big impacts on your career. Many economic historians started with a Ph.D. in history. Times have changed since 1972. What would your advice be to a graduate student in a history department who has an interest in economic history?

I was going to say I don't know if my history department would hire me today as a 26-year old Ph.D. with the kind of dissertation I wrote. I don't think it would be seen as bad history but simply as too far afield from the interests of the department's members to fit with the needs of the graduate program. It wouldn't correspond with the needs of the curriculum. If that's true, then there wouldn't be much of a future in a history department for someone who was an economic historian whose work was relatively quantitative and informed by economic theory. So that's a pretty pessimistic assessment. In effect, it's saying that the historical questions that interest us can't be pursued within history departments now.

Without wanting to engage in further pessimism, what do you think is the future of economic history?

There are two answers to that. One is that the economic history as we have known it still has many interesting subjects to investigate. It continues to show vitality and ingenuity methodologically and to broaden the range of topics. But I think that this is kind of a Baroque phase of its development. It is elaborating on its core themes that have made the new economic history movement going back so exciting, but it is not vital in the sense of attracting to it a broad circle outside of economic history. So while I think that the history of economics is inherently important and exciting, I expect that at some point it's going to be done in a different way. How do you get from here to there? We usually talk about marginal change, but, more likely, it will be some kind of discontinuity not easy to describe or predict. At some point in the not too distant future, however, something like that will have to happen for the discipline to be rejuvenated. I'd like to think that historians could play some role in it, but I can't point to a sector where that's the case. What might be more likely is that other social scientists will have things to say that ought to attract the attention of economic historians. Historical sociologists and anthropologists are in their own funny ways addressing questions that we should be more open to and involved in.

It sounds like we're almost back where we started from, with these interdisciplinary
dimensions of our work and with what keeps our field invigorated and relevant over time. That’s an optimistic note to close on. Thank you again for your time.

You’re welcome.

Selected Bibliography:

De Vries, Jan.


_Leonard Bernstein enjoys fish with Dr. de Koos Scheveningen Holland June 1947_
The Cliometric Society and Economic History Association
Sessions at ASSA 2005
By Werner Troesken, Pittsburgh

(Philadelphia) The Cliometric Society and the Economic History Association offered six sessions at the annual ASSA meetings in January. The following report covers only a selection of the papers presented and does not reflect on the quality of the omitted papers but rather the interests and time constraints of the reporter. The Cliometric Society session, “Institutions and Growth in the Long Run,” convened on January 7, 2005 in the Marriott Hotel, Philadelphia. It was chaired by Rick Geddes (Cornell). For this particular session, most of the time was allotted to the authors and the discussants, and relatively little time was allowed for comments from the floor, which represented a break from the usual Cliob style.

Daniel Berkowitz (Pittsburgh) and Karen Clay (Carnegie Mellon) spoke on “The Effect of Judicial Independence on the Courts: Evidence from the American States.” They explore the historical origins of judicial quality and show that initial colonial legal systems have had an enduring effect on the quality of present-day courts. Specifically, the authors find that states initially settled by countries with a civil law tradition – France, Spain, and Mexico – have lower quality today than those states settled by common-law countries. They also provide evidence that these long-term effects might be the result of unusually strong ties between the judiciary and local elites and of the hybridization of the common law.

Wally Mullin (George Washington) praised the authors for providing important evidence showing how early legal institutions continue to affect outcomes in the modern world. Mullin suggested that, in addition to focusing on intrastate competition, Berkowitz and Clay should also consider how competition among states influenced court quality. He wondered whether competition among the states for settlers helped to shape the structure of the courts and the law. Mullin recommended that the authors make state-by-state comparisons and look for natural experiments that may help to sort out the effects of civil and common law traditions. He pointed out that one natural experiment that may have affected the courts is a recent political change, such as the rise of the Republican Party in the South.

Comments from the audience focused on questions related to geographic clustering, the use of dummy variables or other variables (such as temperature and rainfall) to capture the regional effects of the South, and measurements of court quality. Rebecca Menes (George Mason) wanted the authors to look at asbestos related litigation to estimate court quality.

In “Testing for the Economic Impact of Adopting the US Constitution: Purchasing Power Parity across Six British Colonies vs. the Same Six US States, 1748-1811,” Farley Grubb (Delaware) examines whether the adoption of the US Constitution resulted in a change in purchasing power parity (PPP) in the former colonies. His hypothesis is that the adoption of the Constitution should have reduced trade barriers among the colonies and promoted PPP. To test it, Grubb constructed exchange rates and combined them with price indices for each of the colonies and then looked at whether there was a convergence of prices after the adoption of the Constitution. He claims that
even when using short spans of data and low-powered tests, he cannot reject PPP for either period. Moreover, Grubb concludes that PPP probably holds with greater confidence for the pre-unification period (1740-76) than for the post-unification period (1796-1811).

Bob McGuire (Akron) asked whether the paper actually tested for the general economic impact of the Constitution as opposed to just its effect on PPP. Moreover, he noted that the Constitution might not have had an immediate effect on economic performance and encouraged Grubb to look at longer-term data. In addition, McGuire was curious why it is that PPP holds for the 18th and 19th century but not the 20th century. He put forward that something might be amiss with the econometric tests for PPP. Grubb, however, maintained that PPP is often rejected with 20th-century data, because goods today are more complex than those of the past.

In the general discussion, Menes proposed looking at simple and complex goods to address the complexity issue raised by Grubb. Others said that it was not surprising to find PPP unchanged before and after adoption of the Constitution and that Grubb might find much larger effects if he looked at something like government borrowing or interest rates.

David Khoudour-Casteras (Institut d'Etudes Politiques de Paris and Berkeley) continued the session by studying the historical influence of welfare states on labor mobility. The author focuses on the 1883 implementation of social insurance in Bismarck and develops a model that relates the migration decisions of workers to direct and indirect wages (such as welfare benefits). Khoudour-Casteras' findings indicate that German emigration dropped sharply after 1883, and this change was driven mainly by the introduction of social insurance programs.

In his comments, John Murray (Toledo) thought that Khoudour-Casteras should explore how the composition of migration changed in response to the introduction of social insurance. In particular, Murray observed that, while social insurance programs covered workers in some sectors, industries, and occupations, other workers were not covered. He believed that if the Khoudour-Casteras hypothesis is correct, then the proportion of workers in non-covered sectors who were migrating would have risen relative to those who were in sectors that were covered.

Philip Keefer (World Bank) presented the final paper, "All Democracies Are Not the Same: Identifying the Democratic Institutions That Matter for Growth," in which he argues that democracy alone has been insufficient to promote growth and that what is needed is a particular kind of democracy – the kind that protects property rights. To support his argument, Keefer shows that if the following two conditions are satisfied, there is a positive relationship between democracy and growth: politicians must be able to make credible promises to voters and voters must be informed, because uninformed voters cannot hold politicians accountable.

Geddes felt that Keefer's important contribution is somewhat undermined by the extensive dialogue carried on with other authors within the paper. He advised Keefer to reduce some of the dialogue. Questions from the audience focused on the extent to which one could have property rights without democracy and on the role that inequality might play.
After two days of stimulating intellectual debates, it was time to unwind, and John Murray provided the setting. Murray hosted the annual Clio Reception in his “Sultan of Suave” Suite at the Philadelphia Marriott Downtown. If price is any indication of quality (and what economic historian worth their salt does not believe that it is), then this was by far the greatest bash ever thrown by Clio. Unnamed hotel employees reported that the quantity of broken glass and smashed furniture they removed from the premises the following morning rivaled that of the Octogenarian Church Ladies Auxiliary party thrown in the same suite a week earlier. Clions themselves, observing the strict code of silence surrounding such events, would only report that “a good time was had by all.”

EHA Meeting (Continued from page 1)

that an economic historian was able to accumulate. He noted that the learning-by-doing story that Sutthipaisal told explains most of the inventive activity but certainly was not the only story. He lauded the extraordinary detail and compelling analysis, especially in explaining learning by doing connections. Furman did, however, want to know whether Sutthipaisal could explicitly include the initial distribution of production and knowledge skills. He also wondered what the role of firms was in this story. And, finally, he asked if the author could develop an overall theoretical framework on how various characteristics affect innovation.

From the floor, the audience was curious if the period chosen for the study lends much insight into contemporary applications. Also, several audience members pointed out that many industries are no longer as tightly compacted as before, i.e. the location of production and research are not the same. Finally, Sutthipaisal was encouraged to think about the relationship between process and product. It might help explain differences between the industries she examined.

“How Silicon Valley’s Skilled Immigrants are Transforming the Geography of Innovation” by Anna Lee Saxenian (Berkeley) followed. Saxenian confessed that she was neither a historian nor an economist. Despite these obvious shortcomings, the assembled audience listened with rapt attention.

Discussant Maryann Feldman (Toronto) opened with the big question: how much have things changed since the 19th century? In particular, she referred to the impact of the speed of information diffusion. The degree of global competition is now much more intense in nature. There has been an increase in innovation by peripheral countries, such as Ireland and Taiwan, and innovation is beginning to happen in places like India and China. Places receiving the most multinational investment are not the places with the most patent activity. They have developed not due to the presence of multinationals or government incentives but due to cross-regional traffic of people who travel and “sow seeds.” Competition today is driven by the ability to innovate and adjust more than by cost. When foreign students educated in the US go back home they take knowledge, contacts, and methods with them.
From the floor, the comments included the fact that at 66 pages, this paper was approaching manuscript length and perhaps it was a book in the making. The audience wanted to know where these folks were coming from within countries. That is, do they return to their home country in general or to their hometown? What about what the literature calls “reception for capacity” (in other words, you only go home if there is a receptive community there for you)? Which is more important, the total number of engineers in Taiwan or the total number trained in the US? And, what about the broader context of development in other countries?

Petra Moser (MIT and NBER) closed the session with “Do Patents Encourage Knowledge Spillovers? Evidence from the Geographic Location of Innovations at the Crystal Palace.” The two primary goals of patent laws are to encourage invention and to diffuse new knowledge gleaned from invention. Moser uses differences in patenting rates across industries to examine whether patenting helps to diffuse technical knowledge. Her preliminary findings, based on a data set of British exhibits at the 1851 Crystal Palace Exhibition in London, suggest that patents facilitated the spread of new ideas.

Discussant Johann Peter Murmann (Northwestern) stated that research was often about perspective. The patent data used by Moser, for example, has been available for 150 years, but no one else had ever thought of looking at them in this way. He called it an ingenious use of historical data to address current questions. By way of improvement, he thought that Moser should explain the agricultural machinery outlier, which has a high patent rate but a low HHI. He also proposed that Moser control as best as possible for geographic concentration. Finally, he urged her to tease out how strong a force patenting is in diffusing knowledge.

Questions from the floor were mostly methodological and focused on the issue of how to handle more than one patent per item. One suggestion was made that Moser take care not to interchange the words invention and innovation, which are not the same thing, especially in the context she is discussing.

“Long Run Economic Growth and Inequality” was chaired by Jacob Metzer (Hebrew University) and was one of the more exciting sessions at the conference. Leandro Prados de Escosura (Georgetown and Universidad Carlos III, Madrid) began the session with his study of long-run income and human development inequality between nations, which utilized his previous work on constant versus current prices in the calculation of GDP series. His main conclusions focus on the role globalization of factor and commodity markets played in convergence before 1914, the relatively strong within-group convergence over his entire period, and the persistent and even widening of differences between regions of the world in the 20th century.

Comments by discussant Stanley Engerman (Rochester and NBER) were read by Metzer and in part called for an expansion of the
analysis to China and South Asia. Stephen Broadberry (Warwick) remarked that the current and constant price-adjusted series actually looked quite similar.

The second paper, "The Evolution of Income Concentration in Japan, 1885-2002: Evidence from Income Tax Statistics," was delivered by Chiaki Moriguchi (Northwestern and NBER), with overhead assistance from her co-author, Emmanuel Saez (Berkeley and NBER). Utilizing data culled from Japanese tax records, they follow the income shares of the top-wealth percentiles of Japanese society from 1890-1980, a period when Japan carried out its stunning economic modernization. They find an interesting postwar divergence of US and Japanese experiences as the top income in Japan remained relatively constant. Saez's previous work documented a large increase in wealth held by these groups in the US.

Discussant Peter Lindert (UC-Davis and NBER) cited three further areas for exploration: comparisons with other countries such as Germany, placing pre-WWII Japan in its development context, and exploring the important area of executive compensation in a comparative way. A comment from the audience emphasized how such tax data are inherently poor and called for the use of real wage trends to analyze inequality in Japan.

Robert Gordon (Northwestern and NBER) gave the last paper, "Two Centuries of Economic Growth: Europe Chasing the American Frontier." He makes an explicit comparison of productivity trends between the US and Europe, focusing on the labor/leisure trade-off and mis-measurement issues in Europe's fall-back in recent decades. The initial productivity lead by the US stemmed from a large domestic market, utilization of natural resources, and the benefits of a unified political system. The post-WWII European catch-up was undermined by a fall in European hours and possibly overstated US output growth.

Gavin Wright (Stanford) gave a detailed set of comments, responded to Gordon's exhortations of his work, and culminated with the memorable line: "...the history of the last two periods falls into place like the last two pieces of a jigsaw puzzle."

Jean-Laurent Rosenthal (UCLA) chaired the session on "Government Policy Towards Innovation," which was opened by John Wallis (Maryland) and Barry Weingast (Stanford) discussing "Equilibrium Impotence: Why the States and Not the American National Government." Building a national transportation system was a central link in the development of the 19th-century American economy. Despite calls for national improvement, the federal government spent far less on transportation projects between 1790 and 1860 than state and local governments did. The authors develop a general political economy model of financing large transportation investments and show that most often the federal government used a method of finance suited for small local projects as opposed to interregional projects. States, on the other hand, were able to tailor taxes to suit political constraints. As a result, they built most of the largest and important interregional transportation links during this period. Wallis and Weingast earned the admiration of the assembled audience and, more importantly, drinks on Chair Rosenthal, for completing their presentation in under ten minutes.

Discussant Rick Steckel (Ohio State and NBER) announced that he was skeptical after he first read the paper, agnostic after his second read, and that if they would let him
rewrite the paper, he would be receptive to their claims. He was critical of the paper primarily because he thought it was really two papers which hindered one another. On the one hand, the authors are asking how government spending was allocated and what projects were funded by the federal government and what by the state. On the other, they address an economic growth question: was it helped or hindered by the ratio of federal to state government financing? Regarding the latter, Steckel wondered if the reason for the high state/fed ratio was because most benefits were local and that is why the federal government did not get involved. One obvious counter example to this is the transcontinental railroad, which Steckel suggested the authors might want to discuss.

“Antitrust and Innovation Policy in Early Cold War America” by Steve Usselman (Georgia Tech) was next on the docket. Usselman opened by admitting that he knew far more about the paper just given than he did about his own. In his own paper, he examines the influence of antitrust policy upon technological change in the US computing and paper industries during the decades following WWII. By examining developments in two widely divergent industries, he attempts to discern whether the Department of Justice acted upon a comprehensive theoretical understanding of the relationship between competition, market structure, and technical change. He also explores whether antitrust activities significantly altered firm behavior regarding technical change, whether any changes in firm behavior followed paths anticipated by the Department of Justice, and how altered firm behavior may have influenced the course of technical change.

Discussant George Bittlingmayer (Kansas) praised the institutional detail of Usselman’s paper. His main question was how to test if antitrust legislation helped or hurt innovation in computing. He suggested that Usselman examine some case studies and asked to see some data to accompany the institutional story. Audience members felt he might want to tailor his story to the history of IBM. They also asked if innovation led to antitrust suits or vice versa. Ultimately, the question is whether we have too much or too little antitrust. Phil Hoffman (CalTech) wanted to know what role federalism played in the argument.

“Social Welfare in Victorian Britain” was chaired by Susan Wolcott (SUNY Binghampton). George Boyer (Cornell) and Timothy Schmidle (Cornell) started the session, “Poverty among the Elderly in Victorian Britain.” After measuring the rate of pauperism among the elderly in the late 19th century, they find some deterrent effect of the workhouses and regional differences between the north and the south. Deirdre McCloskey (Illinois at Chicago) praised the de-emphasis on standard errors and raised the issue of how these elderly actually cared for themselves, a subject echoed in other comments.

Jason Long (Colby College) turned to the other end of age distribution in “The Economic Returns to Primary Schooling in Victorian England.” Utilizing his matched census sample of men in 1851 and 1881, he attempts to measure the impact of attending school on socioeconomic achievement later in life. After dealing with significant data and selection issues, he finds a significant effect and possibly the presence of an undersupply of schooling during this period. The comments of discussant Tim Leunig (LSE) and others involved suggestions for refining the empirical approach and exploring the actual supply of schooling during this period.
Adhering to the idiom that “all work and no play makes economists dismal scientists,” Friday concluded with a reception at the Tech Museum, jointly hosted by Santa Clara University and Stanford University. Good wine, bad jokes, and suspect stories all flowed freely – three positive indicators of a successful party.

Sessions resumed on Saturday with “Chalk and Talk: Science, Academia, and Innovation,” chaired by Douglass North (Wash U). He began by warning all participants that he would rule the clock with an iron fist, and he did, stalking Megan MacGarvie when she ran long. In the end, to nobody’s surprise, the session came in on time.

David Mowrey (Berkeley) and Bhaven Sampat (Georgia Tech) presented “Why Did US Universities begin Patenting and Licensing during the 1970s?” Relatively few universities managed their patent portfolios themselves until the 1970s. Mowrey and Sampat review the causes of increased entry by universities into direct management of patenting and licensing during that decade. They also looked at factors underpinning the growth in private universities’ role as patenters and licensors. The authors draw on a database of university patents covering the period 1948-1980, as well as data on Institutional Patent Agreements (IPAs) between universities and federal agencies responsible for the bulk of academic research funding, in an analysis of the determinants of entry and the “governance” of licensing under the terms of IPAs.

Linda Cohen (UC-Irvine) felt the paper convincingly showed that the Bayh-Dole bill was a response to pressures brought by universities more so than a cause of the change. She warned that the structural changes of universities during the 1970s needed to be considered. This was a period of decreasing academic support for defense-related research and increasing support for biomedical research. Also, some major research universities, including Harvard and Columbia, prohibited the taking of patents. In addition, she encouraged the authors to consider agriculture in their study, because it was not allowed by Bayh-Dole.

From the floor, Alex Field (Santa Clara) wondered whether the crude comparison of university patents and productivity was a causal link. Mowrey responded that perhaps it was connected to decreasing DoD funding, but he had not yet fully explored it. Bernie Albaum (Santa Cruz) started what became an ongoing discussion of the impact of WWII on government/university joint research. David Mitch (Maryland-Baltimore County) asked how the role of research in universities changed over time and speculated on how big that role should be.

Megan MacGarvie (Boston University) was up next with “Academic Science and the Growth of Industrial Research.” She explores the link between the blossoming of American higher education in the late 19th and early 20th centuries and the growth of
industrial research, taking a two-pronged approach to the research question. First, she finds that the number of industrial research labs in a county in a given year is significantly related to the number of universities and the extent of university spending on research. She discovers, however, for a firm level sub-sample consisting of firms in the chemical industry, that proximity to academic science is shown to matter only for young firms. Secondly, she tests for evidence of spillovers arising from university research.

Ross Thomson (Vermont) proclaimed MacGarvie’s paper a treat to read, as it was an important contribution with a novel thesis. The well-specified, careful econometrics gave confidence to the conclusions. He did state that universities are more than just chemistry Ph.D. programs, which is how the author measures research. He also asked whether the measure of Ph.D’s best captures research. How about publications or citations? There might be a quality effect, not just a quantity effect. He was also curious whether urbanization could be a factor in the concentration of skills. Finally, he encouraged the author to better develop the definition of collaboration of research. For example, what kinds of collaboration take place, and how big is the collaboration? As North ushered him from the podium with time running out, he noted that he was planning on concluding his statements by citing the importance of North’s work to this research, but he would have to wait on that.

Scott Stern (Northwestern and NBER) concluded the session with “The Evolution of Biological Resource Centers.” Biological resource centers (BRCs) are “living libraries” that authenticate, preserve, and offer independent access to biological materials, such as cells, cultures, and specimens. Stern assesses the role that such institutions played within the life sciences over the last century. From the perspective of the economics of science and technological change, BRCs offer a significant case study of the importance and requirements for step-by-step scientific and technological progress and the impact of institutions on the process of cumulative knowledge production.

Discussant Shane Greenstein (Northwestern and NBER) said that he anticipated Scott would not leave time to get past his motivation for the paper, so he planned on presenting the paper himself. He pointed out that Stern talks about the accumulation of knowledge, a familiar topic. The unfamiliar topic that he addresses is what is the best type of organizational structure in which to carry out this activity. Greenstein says that the statistical work is mostly about the former, but wants him to spend more time on the latter.

The aptly titled session, “The Three Dons: The View from the Spires of Oxford,” was chaired by Philip Hoffman (CalTech). Although early in the morning, this was a packed session bursting with novel ideas. Liam Brunt (Oxford) began with his comparative work, “Labour Productivity in Arable Agriculture around the World, 1700-
1870.” He measures labor productivity in winter wheat farming utilizing a wide variety of sources for several benchmark years in the 18th and 19th centuries for several countries. While he finds England (and as Jack Goldstone (George Mason) later pointed out, Scotland) to be extremely productive throughout, he states that differences in the West were due to output per acre. The differences between the West and the East were driven by the number of acres per worker. Discussant Greg Clark (UC-Davis) was rather critical of all this, noting that he simply did not believe the data and that what Brunt shows does not reflect his initial Pomeranz-like motivations.

Robert Allen (Oxford), presented “The Nitrogen Hypothesis and the English Agricultural Revolution: A Biological Approach,” in which he examines the role of nitrogen in explaining English agricultural productivity growth. Educating everyone in the room on the intricacies of crop science, Allen posited a model of crop production that explicitly introduced various forms of nitrogen fixation. After simulating the model, he concluded that about 50% of wheat yield growth between 1300 and 1800 was due to changes that increased the amount of nitrogen in the soil.

All this talk of soil chemistry provoked George Grantham (McGill) to remark that nitrogen in the soil resembled human nutrition, which fueled height growth (“yields”) or was undermined by disease (“weeds”). Discussant Cormac O’Grada (University College Dublin) wondered about European comparisons and why post-plague, labor-starved England would have adopted a labor intensive crop like peas.

In the last paper of this session, “The North Atlantic Meat Trade and its Institutional Consequences,” Knick Harley (Oxford) studies the Atlantic beef trade and intertwined linkages to the industrial organization of the shipping trade. According to Harley, by offering extra shipping capacity, the beef trade fostered low gain shipping rates and a divergence between berth and charter shipping rates. In addition, the nature of the product fostered important economies of scale rising from the knowledge held by the meat trusts in their distribution networks. Andrew Coleman (University of Michigan) applauded the paper but questioned the instrumentality of the beef trade for changes in the organization of shipping. He emphasized the collusive agreements between shipping countries and claimed that cities without beef trades in Europe appear to have had grain prices series that looked remarkably similar to those with trade.

Chair Richard Gilbert (Berkeley) opened “Firms and Inventors in the 19th and 20th Centuries” by introducing Naomi Lamoreaux and Kenneth Sokoloff (both UCLA and NBER). In “The Decline of the Independent Inventor: A Schumpeterian Story?” the authors explore the Schumpeterian idea that in-house R&D by firms will lead to the death of entrepreneurs. They analyze the career patterns of three cohorts of inventors from the late 19th and early 20th century, and find that over time highly productive inventors were increasingly likely to form long-term attachments with firms. Entrepreneurship was not dead, but the increasing capital requirements, both financial and human, for effective invention and the need for inventors to establish a reputation before they could attract support made it more difficult for creative people to pursue careers as inventors. The relative numbers of highly productive inventors in the population correspondingly decreased, as did patenting rates per capita.
Discussant Ashish Arora (Carnegie-Mellon) began by asking how the reporting of patents was handled under various situations. For example, what about inventors like Edison, who sold some patents and used others, or Farnsworth, who worked alone at times and at others accumulated patents while working for an employer? She said that the authors’ results show that people become more specialized over time, but she wanted a clarification on how this affected the companies they worked for. Were the inventors specializing within large firms or between small startup type firms?

“Patents and Technological Competencies: A Cross-National Study of Intellectual Property Right Strategies in the Synthetic Dye Industry, 1857-1914” by Johann Peter Murmann followed. He began by unapologetically plugging his new book but did offer a money back guarantee if you didn’t like it. The dramatic increase of firm patenting in the US during the last two decades may give the impression that the acquisition of patents is becoming increasingly important for protecting and leveraging technological competencies. An historical perspective on how firms acquire technological competencies and leverage them in different markets reveals, however, that it is far from obvious that the possession of patents will lead to long-term, competitive success. Analyzing the history of the synthetic dye industry from 1857-1914 in a variety of countries, Murmann contributes to a more nuanced understanding of the role of patents in the development of firm capabilities.

Bronwyn Hall (Berkeley and NBER) responded to Murmann’s money back guarantee offer by noting the possibility for arbitrage. He checked Amazon.com during the presentation to read the book’s table of contents and said that it was selling for $20 more than the price at the ESHA book display. Regarding the paper at hand, he wanted to know about the effectiveness of the science industry capital links in Germany versus other countries. He also wanted to see the author incorporate a discussion of that comparison. He suggested the story be quantified more. For example, what is the litigation history of each invention? How was each invention protected? How many patents were issued, and what about trade secrets? Finally, are patents necessary in the early development of a technology? Hall concluded that history matters, admitting that was as close as he could get to being an economic historian.

“Technology, Investment, Finance and Performance in the Second Industrial Revolution” by Mary O’Sullivan (INSEAD) concluded the session. She analyzes the role of finance in three prominent industries in the US – electrical equipment, chemicals, and automobiles – for the period 1890 to 1929. In recent research on the relationship between finance and growth, there has been growing attention to heterogeneity across industries in their dependence on the financial system and the benefits that they derive from it. Various hypotheses have been advanced about the financial demands of different industries and their determinants. However, a dearth of evidence on the patterns of finance across industries and their relationship to technology, investment, and performance has hampered progress on this topic.

Barry Eichengreen (Berkeley and NBER) remarked that he received this paper only three days earlier, which is normal for the profession. It did not have a conclusion, which he appreciated, for it gave him a greater degree of freedom. He was impressed by the connections drawn between innovation and finance with firm level data,
but he cautioned that the author needs to be concerned about the small numbers and the representativeness of the corporations that published the balance sheets in her sample. For example, firms that were not public, and thus published no balance sheet, did not seek external financing like firms in her study. Consequently, there is a selectivity problem.

Michael Bordo (Rutgers and NBER) presided over “Financial Markets and Institutions.” Financial institutions of various forms were the theme for this session, which began with Noel Maurer (Harvard) presenting “Related Lending and Economic Performance: Evidence from Mexico,” with overhead assistance from his co-author, Stephen Haber (Stanford). They study the banking sector of Mexico from 1885-1915 and explore its relationship with the textile industry to try to tease out some of the effects of related lending in comparison with the mostly negative views of such practices in modern Mexico. They find little in the way of adverse effects or tunneling from related lending in the textile sector, noting that mills that received related lending were no less efficient than other mills.

Discussant Larry Neal (Illinois and NBER) asked about the broader legal environment and possible comparisons with other countries, points then echoed by Charles Calomiris (Columbia). Steve Quinn (Texas Christian University) offered the view that Naomi Lamoreaux’s work on related lending in New England is a natural comparison.

Muriel Petit-Konczyk (Lille, ESA) delivered “The Development of the Paris Bourse in the Interwar Period,” written with Pierre-Cyrille Hautcoeur (ENS, Paris). They analyze a new blue-chip index of stocks in the Parisian Bourse in the interwar period, which was produced through some painstaking archival work. Their index shows a relatively strong recovery from 1929, which differs from the Dow Jones index in the US.

Richard Sylla (NYU and NBER) indicated the problems of comparison with the Dow Jones index, which is not market-capped. Sylla also remarked on the interesting presence of foreign firms in the index, the implications for historians of the Great Depression, and the dominating presence of the Suez Canal Company in the Bourse.

The final paper, “Contractual Responses to Institutional Changes: An Historical Institutional Analysis” by Yadira Gonzalez de Lara (Alicante), took us to the commercial revolution of the Middle Ages. She studies the role of the Venetian state as an institution that enforced trade and commercial relations amongst citizens in the absence of family and reputation mechanisms. Drawing on game theory and archival records, Gonzalez de Lara contrasted this state-based contract reinforcement with the Genoese experience. In her comments, Maristella Botticini (Boston University) recommended that she pursue this comparison further but wondered if Genoa did not try to help its merchants too. Further comments by Botticini, Lee Alston (Colorado), and Neal all aimed at eliciting more detail on the financial and political systems at work in Venice.

The remainder of the day on Saturday was given over to the dissertation and plenary sessions. The finalists for the Nevins Prize were introduced by Farley Grubb (Delaware) and included Duol Kim (UC-Davis), presenting “Firm Financing, Ownership Structure and Market Competition in United States Manufacturing during the Nineteenth Century;” James Stewart (Reed College), with “Essays on the Economic History of the American Frontier;” and the winner, Rebecca
Holmes (Arizona), author of “The Impact of State Labor Regulations on Manufacturing Input Demand during the Progressive Era.”


The plenary session, chaired by Joel Mokyr, closed out the academic portion of the day. Paul Romer (Stanford) discussed “Growth Theory, Economic History, and the Arc of Science,” followed by Nathan Rosenberg (Stanford) who presented “Endogenous Changes in 20th-Century America.”

Sunday morning began early for the participants in the annual teacher’s breakfast, organized by Ken Snowden (North Carolina-Greensboro). Robert Whaples (Wake Forest) led a discussion of the use of EH.Net Encyclopedia in economic history classes.

Betsy Hoffman (Colorado) chaired the morning session on “Institutions and Natural Resources in the American West,” which was kicked off by her former colleague, Gary Libecap (Arizona and NBER). He spoke on “Transaction Costs and Resistance to Water Rights Transfers: The Legacy and Lessons of the Owens Valley Transfer to Los Angeles.” The completion of the Los Angeles Aqueduct from Owens Valley in 1917 brought an important new source of water to the city. The water transfer was the first, one of the largest, and the most controversial rural-to-urban water transfers in the US. Libecap examines the transfer process and negotiations between the city and land owners in the Owens Valley. Between 1905 and 1935, Los Angeles purchased virtually all the private property in the valley. It would seem that since they purchased the land and internalized the externalities involved, the episode should have been a success story rather than one that complicates current transfer efforts. Instead, the negotiations were acrimonious and periodically interrupted by violence, leading to dynamiting of part of the Los Angeles aqueduct, one of the country’s largest public works projects up to that time. He looks at the sources of the disputes over price, why they were so difficult to resolve, and the likely economic history of agriculture in the valley had irrigation continued.

Discussant Michael Hanemann (Berkeley) suggested a couple of ways in which the lens through which Libecap views the ultimate impact of land sales in Owens Valley could be extended. He was not totally convinced
the outcome was as positive as the author suggests. Libecap may be right, but Hanemann felt he needed more evidence. The impacts on agricultural production and employment must also be considered and were likely negative. It would also be useful to know about the timing. Did farms down river go dry and out of business quickly? It may be that the economic impact came later than 1930, after LA increased pumping amounts. Hanemann encouraged Libecap to look beyond 1930 to be sure the impact occurs when he claims it does. Lamoreaux wanted to know how the author considered other beneficiaries in the story besides the city.

**Edward McDevitt** (California State, Northridge) followed with “The Evolution of Irrigation Institutions in California: The Rise of the Irrigation District in California 1910-1930.” He addresses the phenomenon of the dramatic decline of private irrigation institutions and the corresponding rise of public irrigation institutions in early 20th-century California. McDevitt argues that the rise of the public irrigation district was the result of a complex interaction of agricultural, regulatory, and legal changes during these early years. As large farm holdings were increasingly subdivided and sold during the 19th and early 20th centuries, and with the imposition of water rate regulation in 1912 and the growing political influence of water users, it became increasingly difficult for private irrigation companies to capture a sufficient share of the benefits of new, large-scale irrigation projects to make them privately profitable. The rising social rates of return on irrigation investment after 1910, coupled with the failure of private water companies to realize these gains, led to a demand for organizations which could appropriate these benefits. This in turn led to key legislation in 1911 and 1913, which greatly enhanced the organizational advantages of the public irrigation district.

Ann Carlos (Colorado) found this a very interesting paper with many topics intertwined. Although the author talked about the price of land and wages, Carlos wanted a discussion about the impact of increases in population on those prices. She also thought timing problems with the alfalfa to grain change exist. For example, what was the effect of WWI? In addition, she wanted the establishment of the railroad commission in 1911 to be considered, as it has an impact on the rate structure used by irrigation. She felt more information on bonds, such as who purchased them, would be helpful. Finally, she proposed McDevitt look at the political economy issues.

From the floor, Hanemann offered the view that a lender would prefer a public entity for projects such as irrigation facilities, because it has a lower default risk than a private creditor. He urged the author to acknowledge this in his discussion about the choice of organization by irrigation companies.

“Why Would Order without Law Result in First Possession? Water Rights during the California Gold Rush” by **Mark Kanazawa** (Carleton) closed out the conference. Economists and legal scholars have long been intrigued by the question of why orderly resource allocation often occurs in the absence of formal laws that define and enforce property rights. Kanazawa investigates the emergence of the legal principle of first possession from just such a situation: the mining camps of the early California Gold Rush. Despite the absence of formal controlling law, the mining camps set in place orderly procedures for acquiring, maintaining, and alienating water rights but varied dramatically in their reliance on first
possession. This fact permits us to gain insights into the factors that influence the adoption of first possession by private agents under democratic conditions essentially unconstrained by controlling legal precepts.

James Stewart (Reed College) stated that Kanazawa’s paper represented a significant contribution to our understanding of the origins of water rights laws. He would like to see a more systematic analysis of how rights of first possession law evolved. How exactly did miners establish rights of first possession? How they were required to do this would greatly affect who was able to obtain these rights. How were they retained? For example, who enforced the claims? Stewart thought the role of the transaction costs involved in establishing the two different types of laws needs to be discussed. How do we handle the camps in Kanazawa’s sample that make no mention of water laws? Does this create a selection bias problem? Alston asked if the author saw similar results in other geographic areas and if the results could be generalized. Alan Dye (Barnard) was curious about the ethnicity of the camps and if customs had an influence on the choice of laws.

After another successful conference, amid the neverending sunshine, economic historians departed for all corners of the globe. They will reconvene again from September 16-18, 2005 in Toronto, returning to Canada for the first time since 1991.

---

**Clio in Retrospect: 1967**
By Michael Haupert, UW-La Crosse

(West Lafayette) A crowd gathered in West Lafayette, IN early on the morning of Thursday, January 26, 1967. While newspapers had been reporting the planned event for weeks, nobody anticipated the crowds that showed up at Nelson’s Electronics and Stereo Emporium for the unveiling of the latest in audio technology: the eight-track tape player. The crowd, bolstered by a contingent of economic historians from across the country, all agreed that it was the peak of human ingenuity. The price, $67.95 including cables to integrate it to most existing stereo systems, was a bit steep, but the player was well constructed and was expected to last nearly forever. Before noon, the entire stock of eight-track cassettes was sold out. The crowds left impressed, satiated, and some with brand new Magnavox 24” color televisions, a steal at the sale price of $650, including a new piece of technology known as a “remote control.” “Imagine,” one satisfied customer was heard to remark, “I’ll be able to surf through all five channels without having to leave my couch!”
Due to the excitement at Nelson's, the 7th annual Purdue Conference on the Application of Economic Theory and Quantitative Techniques to Problems of History got started a bit later than the scheduled 10:00 a.m. opening presentation. But once they got going, the Clio forebears made up for lost time. Thomas Alexander (Alabama) opened the conference with "Economic Facts and Political Reality: Alabama a Preliminary Survey."

After a hearty lunch of rib roast sandwiches (the caterers bragged about paying only 97 cents per pound) and all the fixins', the conference attendees gathered again at 2:00 p.m. to hear J. David Singer (Michigan) talk about his latest work on international relations. This time he focused his lens on a historical analysis. His paper, "Status, Alliances, and Foreign Relations: A Model of International Reactions," led to future publications: "Formal Alliances, 1816-1965: An Extension of the Basic Data," written with Melvin Small, (Journal of Peace Research 6:3, 1969) and two more articles, with Michael Wallace, published in 1970. They are "Intergovernmental Organization in the Global System, 1815-1964: A Quantitative Description" (International Organization 24:2, Spring 1970) and "Intergovernmental Organization and the Preservation of Peace, 1816-1964: Some Bivariate Relationships" (International Organization 24:3, Summer 1970).

Singer reported the progress of his efforts to create the first systematic effort to generate data aimed at describing international organizations over a lengthy period of time for the purpose of an empirical analysis of propositions, models, and theories in which international organization is a major variable. In particular, he included quantitative measures of the organization's function and the time period of its impact. His interest was in moving the study of international organizations beyond case work and impressions to evidence. In order to do so, it would first be necessary to gather data with which to make such analyses. Among the early questions he looked at was whether the periodic changes in the amount of international governmental organizations are random or predictable. If the latter, to what extent are they functions of conscious decisions, and to what extent are they functions of long-run historical processes over which there is little short run control? As was evidenced by the body of work that arose from this presentation, his work was but the tip of an intellectual iceberg.

James Faust closed out the first day by discussing "The Yeoman and the Westward Movement." A typo in the original program left more than one conference participant a bit disappointed. Many curious attendees were expecting to hear about the Yeti and the Westward movement.

That evening, discussion at the dinner table centered on the spate of corporate mergers that was sweeping the nation. Just under 3000 would take place in 1967 alone, none more high profile than the Pillsbury Dough Boy partnering up with Burger King in what would surely spell doom for the other fledgling national burger chain, McDonalds, which had recently laid claim to selling its 100,000th sandwich. Later, the conversation mellowed as the cool Schlitz flowed. The revolutionary new "quick chill" cans were perfect for evening socializing, and at only 99 cents for a six-pack, they were a luxury any Clion could afford at home. One hot topic of discussion was the debut of a new magazine, Rolling Stone, devoted to following the rock and roll music industry. Few of those in attendance had read the
inaugural issue, but several felt it might appeal to their older children, at least while this current musical fad lasted.

The Friday morning 10:00 session began with Alice Hanson Jones (Wash U) presenting “Wealth Estimates in the Colonial Period.” This would later be published in Economic Development and Cultural Change 18:4, Part 2 (July 1970) and the Journal of Economic History 32:1 (March 1972) as “Wealth Estimates for the New England Colonies about 1770.” The purpose of her work was to estimate the total and per capita wealth of the original colonies in the early 1770s and to discover what she could about the composition and distribution of that wealth. She determines that a rather high standard of living had been reached in the American colonies by the time of the Revolutionary War. Her data suggest that this wealth was unequally distributed among the population in what she characterized as a transitionally commercial era. She also provides quantitative evidence on size of wealth in relation to such characteristics of wealth holders as age, sex, occupation, and whether they left a will at death.

Sam Warner (Wash U) followed with “Patterns of Urban Segregation: Philadelphia in the 18th, 19th, and 20th Centuries,” which was ultimately published in The American Historical Review 74:1 (October 1968) as “If All the World Were Philadelphia: A Scaffolding for Urban History, 1774-1930.” He also published a book on the subject, The Private City: Philadelphia in Three Periods of Its Growth (University of Pennsylvania Press: Philadelphia, 1968). Warner employs the tools of the new economic history to specify the relationships that determine urban growth and change. In particular, he demonstrates a systematic arrangement of some facts about the population of Philadelphia in the years 1774, 1860, and 1930. He then studies the growth of the population, the course of industrialization, the changing locations of workplaces and homes, the shifting intensity of residential clusters, and the group organization of work. Henry McClure continued the Philadelphia theme with “The Philadelphia Housing Picture, 1774-1775,” to conclude a morning of discussion focusing on the Colonial Era.

The afternoon session began with Thomas Berry (Richmond) speaking on “Gold, Prices, and the Local Economy: San Francisco in the 19th Century” and continued with the first of two graduate student presentations included on the program. Donald McCloskey (Harvard) presented “The Demise of the British Steel Industry: Murder, Natural Causes or Suicide?” This research eventually led to two publications, the first in The Quarterly Journal of Economics 82:2, May 1968 titled “Productivity Change in British Pig Iron, 1870-1939.” The second was “The British Iron and Steel Industry, 1870-1914: A Study of the Climacteric in Productivity,” appearing in the Journal of Economic History 29:1, March 1969. McCloskey concentrates on what and how to measure the actual productivity of the British steel industry from the late 1880s to the late 1930s in order to quantify the discussion of the apparent stagnation of the British industry and even the entire British economy. McCloskey argues that British productivity growth in the pig iron industry was essentially zero during this period, but productivity was at least as high as American productivity until 1914. Thus, before 1914, British productivity stagnated simply because Britain had exhausted the current technology. After 1914, however, this explanation does not hold. The exact timing of the technology explanation determines whether one must then look at a sociological or an economic explanation for the decline in productivity in
the latter half of this time period. The earlier the technological explanation no longer applies, the longer the period for which there must be other explanations and the less likely the economic explanation alone can account for the lack of productivity growth.

The sessions began again early on Saturday morning. William Aydelotte (Iowa) got things rolling with "The Conservative and Radical Interpretations of Early Victorian Social Legislation." Aydelotte explores the reason behind some of the major legislation in Victorian England. For example, the repeal of the Corn Laws in 1846 is a focus of much study because it was a major political crisis, but also, as Aydelotte argues, because the conflict represents some of the principal social and political tensions and rivalries of early Victorian England. This paper was an extension of some of his earlier work examining the degree to which the voting patterns in the Victorian House of Commons followed party lines.

**Henry Gemery** (Penn) wrapped up the conference with a discussion of a chapter from his dissertation, "Productivity Growth, Process Change and Technical Change in the Glass Industry: 1899-1935," which he would defend later that year.

The festivities ended before lunch, and shortly thereafter the participants headed home. Several flew on Delta Air Lines, which would see its stock rise from $70.50 a share to $116.125 by year’s end. This tremendous growth was on top of two stock splits the previous year. "As long as the government doesn’t do something stupid, like deregulate the airlines," one departing participant, heavily invested in Delta stock, was heard to say, "my pension is set."

**2004 Business History Conference Prizes**

The following awards were announced at the June 17-19, 2004 annual meeting of the Business History Conference (BHC) in Le Creusot, France. The BHC is the largest professional organization of business historians in the world.

**Lifetime Achievement Award**
Mira Wilkins, Florida International University

**Harold Williamson Prize for Achievement by a Mid-Career Scholar**
Steven Usselman, Georgia Institute of Technology

**Hagley Prize for the Best Book in Business History**

**Herman E. Krooss Prize for the Best Dissertation in Business History**
Tiffany Gill, University of Texas at Austin, "Civic Beauty: Beauty Culturists and the Politics of African American Female Entrepreneurship, 1900-1965," (Rutgers University, 2003).

**Newcomen Prize for the Best Paper in the 2003 volume of Enterprise & Society**

**K. Austin Prize for the Best First Paper**

Presented to the BHC Meeting


Ellen Hartigan-O’Connor, San Jose State University, "The Ties that Buy: Shopping Networks of the Atlantic World."

For more information contact:
Dr. Roger Horowitz, Secretary-Treasurer
Business History Conference
P.O Box 3630
Wilmington, DE 19807
Phone: 302-658-2400, E-Mail: rh@udel.edu
The Fourth Great Awakening: An Interview
with Robert W. Fogel

By Frederic Smoler

Note: Frederic Smoler teaches literature, classics, and modern history at Sarah Lawrence College. This article is reprinted by permission of the author and American Heritage magazine. It originally appeared in the July/August 2001 issue.

Robert Fogel is best known as one of the two authors of *Time on the Cross*, a pathbreaking 1974 book that applied statistics and numerical analysis to history to make a provocative and important point: American slavery on the eve of the Civil War was not an economically inefficient, slowly dying system, as was widely believed at the time, but rather a healthy monster that would perish only when the Union’s armies drove a stake through its heart. The book provoked furious controversy but withstood it so well that it helped Fogel win a Nobel Prize in economics in 1993.

His newest book, *The Fourth Great Awakening and the Future of Egalitarianism*, published by the University of Chicago Press, also makes surprising assertions about our national past. In it Fogel contends that historians have greatly misunderstood the role of evangelical religion in American political events. He argues that over several long periods, technological innovation has brought massive economic change that has in turn fomented social crises the existing political institutions could not handle. Each time this has happened, there has been a political transformation that gave rise to new institutions and laws to cope with the changes. And every transformation, Fogel insists, has been driven by evangelical Christians.

This is a claim as startling as Fogel’s discovery about slavery. American historians typically think of evangelical Christians as being backward-looking and see their occasional forays into politics as attempts to hold back the tides of cultural change. Fogel sees that view as a caricature of a complex and many-sided phenomenon, and he believes that evangelicals are again leading the drive toward a political reformation of the first magnitude right now.

We spoke about *The Fourth Great Awakening* at Dr. Fogel’s office at the University of Chicago’s Center for Population Economics, of which he is the director.

**You argue that evangelical churches and Great Awakenings are a key to American political history. What do you mean?**

In Europe, the main churches are state churches, and they have usually backed governments in power. America is absolutely different: The churches here are independent. Evangelical churches, which have represented the majority of American Protestants, played a leading role in ending aristocratic privilege in America, and they’ve been the principal vehicles through which ordinary people have shaped American society ever since. They’ve promoted
popular democracy, and there has always been a close relationship between populism and evangelical religion in this country.

The First Great Awakening began in the 1730s and ripened into the American Revolution. The Second Great Awakening started about 1800 and produced the crusade against slavery that culminated in our Civil War. The Third Great Awakening came at the end of the nineteenth century and led to the rise of the welfare state. The Fourth Great Awakening, which began about 1960, has recently entered its political phase and is focused on what I call spiritual reform.

This is a cyclical pattern?

Yes, it is — the cycles caused by technology so transforming everything that there’s a gap between economic change and the state of the society. Human institutions always lag behind technological change, and after a certain period of time this results in a cultural crisis that produces deep soul-searching and an effort on the part of people who are concerned to try to come up with ways of reforming the society. I think the most fundamental groups in this process have been the evangelical churches, not merely as people who worry about what is the right society but also as the founders of populist movements. Every populist movement in the United States that has been of enough scope to get into the history books has had a big religious underpinning, and the First and Second Great Awakenings are the two most famous examples. But the populist movement of the last third of the nineteenth century and the early decades of the twentieth, which culminated in the New Deal, was also driven by grass roots evangelical churches. And the new populism, as magazines are beginning to call it, comes out of what we refer to as the religious right. This is a pattern. In the book, I explore this pattern, and I try to show what the connections are.

Your evangelicals are progressives, but many people see them as backward-looking, not only today but, say, when William Jennings Bryan was arguing against Darwinism.

These movements have always had complex and contradictory elements and, if you want to put it in political language, a left and a right. Black Pentecostal and evangelical churches are much more left-oriented in their social programs than are predominantly white evangelical churches, and they want to move in different political directions. But on both sides there’s a belief that society has to be reformed, and while there are strong differences, there is also a considerable area of overlap in what they see as the reform program. There is always an old school and a new school, and there’s always a struggle over whose reforms will win out. That’s true of every one of these movements. Just to mention two issues, the left wing of the evangelical movement was hostile to slavery and friendly to Prohibition, while the right wing was not. We could go through a much larger agenda of issues and see further splits and agreements.

Let’s talk about slavery. How did the basic pattern you describe work there? What was the crucial technological innovation
that sparked a crisis that produced an evangelical and then a political response? The cotton gin?

Not just the cotton gin. The crisis was the intrusion of modern productive methods on all aspects of life. The rise of the factory system drastically changed labor relations and brought pressure on traditional artisans. Advances in ocean transportation made the trek form Europe cheaper and safer and encouraged millions to come to our shores. These immigrants settled mainly in the North, turning small towns into huge cities so rapidly that housing was swamped and so was public sanitation. These cities came into conflict with the agrarian ideal of the country and were very unhealthy. Life expectancy in New York and Philadelphia in 1830 was only 24 years, about 6 years less than for slaves in the South. Between 1820 and 1860, the urban population of the United States grew faster than it ever had or ever would again. There were all kinds of problems that hadn’t really existed before: ethnic conflicts, racial conflicts, pandemic diseases, a decrease in life expectancy, and the sense that the cities were going to corrupt the whole nation. There was great fear in evangelical circles that they were not going to have a city on a hill. They were going to have a hell.

So these people say, “Look, we’re in a crisis. How do we save America? We want to prepare America for the imminent coming of Christ, and look what we’ve got.” So they argue over what the programs should be. What they come up with are things like getting rid of drinking. Alcoholic consumption was about four times as great as now, and that was driven by technological change, which made alcohol so cheap that people could afford fantastic quantities of it. A lot of people became unchurched because the churches couldn’t keep up with the movement of the population. Also, the huge increase in Catholics was transforming a Protestant country where virtually the entire free population had been of British origin in 1790.

What do you do about it? Well, first you develop a campaign to get people to promise not to drink. If that doesn’t work, you pass laws so that it’s illegal for them to drink. You raise the level of education, and particularly you make the King James Bible the center of public education, which creates another crisis, because the Catholics don’t want their children studying the King James Bible, they want them studying the Catholic Bible. Then, when you look around at what’s corrupting people, you decide it’s not only alcohol but also slavery. Slaves can’t achieve grace because they can’t exercise free will, and their masters are corrupted by their pursuit of absolute domination.

Does this mean that without opposition to Catholic immigration and urbanization there wouldn’t have been opposition to slavery?
Anti-immigration politics and antislavery were closely intertwined. Lincoln himself didn’t link the Catholic threat and the slave-power threat, but his campaign manager and many Republican newspapers did. The Republican party had a strong anti-Catholic tinge.

So, the antislavery movement was part of a whole cluster of evangelical-led political movements?

Right. Some of them were about education. Some of them were about temperance. Some of them were about slavery. Some of them were about peace. And, of course, the feminist movement comes out of abolitionism. It’s women in abolitionism who create the feminist movement.

Your Third Great Awakening is in many ways more secular, but it has a big religious component. It’s essentially an attempt to address the rising inequality produced by industrialization, and it turns to government to make things change.

In the Second Great Awakening the notion of how to end slavery was originally that you had to change people’s hearts. They were going to do it by getting the churches to change their creed so that mere ownership of a slave was a sin and incompatible with continued membership. But they couldn’t get any of the main evangelical churches, even the Northern churches, to go that far, so they decided to go outside the churches, over the heads of the church leaders, as some of the antiabolitionists put it, and create a Christian party, called the Liberty party. That party didn’t do well; its first presidential candidate got only 3 percent of the vote in 1840, but it had some of the most brilliant political strategists this country ever created – Salmon Chase is my particular favorite – and within a decade and a half they had created the Republican party, which put Lincoln in the White House. This success provided the political foundation for implementing the subsequent reform agenda of the Third Great Awakening.

The leaders of the Third Great Awakening thought their predecessor reformers hadn’t fully understood how the rise of big business was changing things. In the old agrarian world, someone who went into small business as a journeyman could think that by the time he was 50 or so, he could be the master of his own shop. But nobody working on a furnace in the Carnegie Steel Company thought he was going to own Carnegie when he was 50, if he lived that long. That kind of opportunity was disappearing.

What the reformers were doing now was saying, “Look we’re in a crisis. People are striking. They’re burning down buildings. They’re killing one another. We face the specter of a French type of revolution on American soil. How are we going to save the country?” They come up with the notion that you can no longer depend on market forces alone. You have to have the government intervene, because the power of big business has gotten so large. You’ve got to reduce the supply of labor, after which the price of labor will go up. You’ve got to cut off
immigration, which is bringing too many workers in. You’ve got to get women and children out of the labor pool, to raise the wages of the labor force that remains.

They won out. In general, they produced a state that was more friendly to labor. Most economists today would concede that not all the innovations of the 1930s are useful, but it would be hard to argue that they were never useful.

Let’s go to the Fourth Great Awakening. That one that began in the 1960s.

The ideological upswing began in the sixties. The political realignment it produced began in the 1980s.

And the ideological issue is people beginning to think of the state not as a solution but as part of the problem?

No. Religious conservatives aren’t against state intervention. They never have been. They’re for state intervention for their policies and against state intervention for policies they condemn. But they have made common cause with some economic conservatives who believe that the government plays mainly a negative role. That’s a coalition, not the same movement.

The foundation of my argument is that we’ve become so rich that the material goods that were decisive in 1900 are less and less relevant to politics now. Eighty percent of all consumption 120 years ago was food, clothing, and shelter. Nowadays, that’s down to 15 percent. So the liberal welfare state, which was concerned with alleviating material inequalities, is no longer wholly relevant to the issues that concern us most urgently. We are faced by a crisis of what I call spiritual inequality, and redressing that sort of inequality is the egalitarian agenda of the Fourth Great Awakening.

That’s the most heretical-sounding part of your book.

Not heretical among economists. We’ve been looking into ideas of human capital and knowledge capital for 40 years. The old issues of distribution have largely been solved. The issues in the 1880s, the 1980s, in 1900, even into the 1920s, were whether you’d starve and whether you’d be living six people in a 12-by-12-foot room. These problems were very acute, and we solved them. If we hadn’t, we’d be living about half as long as we are now, and those of us who did get old would be in much worse shape. We’ve gone from lack of nutrient intake to too much nutrient intake, from having no time for leisure to being couch potatoes. So the issues of social and economic progress are still there, but they’re different.

Yet a great many people I know are struggling for enough income to get into the housing market or to secure health care at a level that would once have been part of their employers’ standard benefit package.

Well, if you look at housing, you’ll see that we have more and better, not less. A place like New York City is not typical: If you value being able to go to the theater there, and the museums, then you’re going to be one of the people who boost housing costs. But, nationwide, the average new family has twice as much floor space as their parents did. Housing is not increasing its share of national income, but health care is, as is education.

There is still a problem reaching the dispossessed, the underclass, and it is a severe, exceedingly difficult problem that
won’t be overcome without effectively targeting substantial resources toward it. There is also the problem of the chronically poor. Reaching them, and changing the lives of their children so that they don’t inherit the same position, is one of the most urgent issues of our age. Giving the poor more consumer goods won’t solve anything; they already have a lot of them. They have conveniences that the rich never used to have, like indoor plumbing and electrical light. Nearly everybody has a washing machine or access to one. You know, I’m old enough to remember when not everybody had a radio. Now people have radios coming out of their cars, literally.

**So the Fourth Great Awakening is concerned not with material goods but with what you call immaterial goods. For example?**

If you have a good education and know how the world works, you’re going to have a high standard of living. If you have a poor education and can’t figure out how the game is played, you’re going to have a low standard of living. In business, most capital is no longer physical. At the turn of the century, most capital was physical capital in big businesses. Nowadays it’s mainly human capital: the chemist you have, the computer programmer, the people who know how to advertise or organize a production process.

**So wealth depends on human capital, which depends on education, and the ability to take advantage of education requires spiritual resources that are in fact very unequally distributed.**

Yes. A lot of people my age who are successful came out of very poor families. It’s not that if you’re materially poor, you’re cut off from opportunity. If you get the right kinds of spiritual capital, or knowledge capital, which includes an orientation when you’re very, very young as to how to conduct yourself, how to be disciplined, and how to have a vision of opportunity, you can do very well. If somebody tells you what opportunities there are in front of you, what you can be, and so on, and helps prepare you for the more formal aspects of education, you can do well. I think a big part of the crisis for people who are in poverty, who don’t go up the ladder, is not having this very important set of intangible assets.

We secularists have spawned some legends about this process and have produced a myth in which the psychology and character that let you do well in the modern world are fundamentally secular attitudes. There was a very popular encyclopedia when I was a kid titled *The Book of Knowledge*. I still have it. My mother got it for me when I was 8 or 10, and I just poured over it. When I read about science in it, what I learned was that the evil party in the history of science was the church and that scientists had to fight against the church in order to come up with great discoveries. I didn’t learn until late in my life that Newton was a very religious man. He thought some of his greatest papers were theological papers. In the secularism that I was introduced to, all science was secular, and it was good, and the church was superstition. This prejudice was quite common in the secular branch of the Third Great Awakening, and I think it blinds us
with reflexive hostility to the religious elements of the Fourth Great Awakening.

But what about the antiscientific creationist streak in American evangelicalism?

Science works too well for opposition to it to have much success. It will continue to march forward.

In your view of the Fourth Great Awakening, you don’t accept a conventional argument about the broad political realignment of the last quarter-century, that it began when the Democratic party embraced black America and the party’s Southern wing bolted for the Republican party.

I don’t think there was any big realignment in the immediate wake of the civil rights movement. To me the big issue was that after 1980 the evangelical vote, which had previously been split evenly between the Democrats and the Republicans, quickly shifted to the Republicans, by three to one. That was a big realignment. Did they bolt because of race issues? I don’t think so. The race issues were very well established long before then, yet the Democrats still had most of the statehouses through the 1970s, most of the assemblies, and the big-city vote. The popular realignment really didn’t take place until the eighties.

Evangelicals can be backward-looking as well as forward-looking, can’t they?

It’s not all a unified movement, any more than it was back in the days of slavery and Prohibition. Some 20 percent of evangelicals believe in gay rights. About 30 percent believe in the right to abortion. They’re overwhelmingly conservative on those issues. But the fact remains that great egalitarian efforts of reform in America have always been led by evangelicals. And I think they’re leading again today. They’re pointing out the fact that the main issues now are the distribution of immaterial assets, and they are doing a lot of good things in that respect.

So how do you see the Fourth Great Awakening working itself out?

Well, I hope it will work itself out in compromise, in much the same way I think the Third Great Awakening incorporated much of the legacy of the Second. The Third Great Awakening was an extraordinarily prolific and positive thing in American life. It’s impossible not to incorporate what it has built up. No movement that wants to leave the country in a better condition can fail to recognize how successful that earlier movement has been. One of the things I wanted to do in the book was to show the extent to which the Third Great Awakening succeeded.

You point out that the Third Great Awakening more or less moved from a theological to a secular moral vocabulary but that the Fourth Great Awakening is going the other way.

Well, I’m a very secular fellow, but from my point of view, the vocabulary doesn’t make too much difference. It’s the content of the message that matters. Ultimately, I’m dedicated to the egalitarian ideals that I grew up with, and I’m worried about how you continue that process in an age when the level of material comfort is very high. I don’t think it’s over. There are new mountains to climb. I’ve been trying to define what those mountains are.

How do you interpret the 2000 presidential election results in the light of
your thesis? Do you see Bush’s innovations with faith-based programs as new evidence for the vitality of the Fourth Great Awakening?

We already transfer funds to faith-based programs. What Bush is announcing is a somewhat expanded program, in which he wants to get resources to faith-based programs that serve the young and the elderly. We would probably have moved in this direction no matter who was President, because social needs sooner or later dictate the direction in which the government moves. What we may be seeing is differences in rhetoric, along with some differences in the size of the programs.

Do you see Bush’s electoral strength among evangelical voters as evidence for your thesis?

Not as particularly new evidence. But I will say this: The outcome of the election confirms the fact that the forces of the Fourth Great Awakening are successfully challenging the forces of the Third Great Awakening and are gradually pushing their program to the fore. Economic issues are less important than they were in the 1950s, 1960s, and 1970s, and social issues continue to move to the forefront. To the extent that economic issues remain important, they are about financing Social Security and health care, and the demand for health-care financing arises from the skewing of the age distribution as a result of previous advances in public health and in health care. People want to be healthy enough to enjoy their extended lives. This is a different kind of politics.

---

Announcements

A Quantitative Historical Analysis Workshop will be taught at the University of Michigan June 27-July 22, 2005. This course will provide an introduction to quantitative history as it is currently practiced by historians and social scientists. For information, go to the following website: http://www.icpsr.umich.edu/training/summer/index.html.

Applications should include:
1. Summer Program Registration Form (on website)
2. CV
3. Cover letter explaining why student wants to attend and how it will further completion of Ph.D.
4. A faculty (presumably a member of the SSAH) letter of endorsement

A fee waiver scholarship will be awarded. Applications should be sent by April 29, 2005 to Jerome M. Clubb Award, ICPSR Summer Program, P. O. Box 1248, Ann Arbor, MI 48106

The next European Social Science History Conference will be held in Amsterdam March 22-25, 2006. The ESSHIC Economics Network co-chairs would like you to consider organizing a session on economic history. They are particularly interested in comparative and interdisciplinary research. Sessions with 3-4 research papers are among the most successful. Note that your session at ESSHIC could serve as a (low-budget) pre-conference debut in case you want to organize a session at the next World Congress of Economic History in Helsinki (2006). For more information, go to the ESSHIC website: http://www.iiis.nl/esshic/, or contact either Joerg Baten, University of Tuebingen (joerg.baten@uni-tuebingen.de) or Oscar Gelderblom, Utrecht University (oscar.gelderblom@let.uu.nl).
BOOK PREVIEW

The Democratization of Invention: Patents and Copyrights in American Economic Development, 1790-1920
By B. Zorina Khan

Note: The following is an excerpt from Chapter One of The Democratization of Invention by B. Zorina Khan, forthcoming in July 2005 from Cambridge University Press.

This book examines American experience in a European mirror and contrasts intellectual property institutions in Britain, France, and the United States. The philosophy and enforcement of intellectual property laws in Britain and France, the structure of the patent and copyright systems, and the resulting patterns of invention were all consistent with the oligarchic nature of European society. Although there is little consensus on many of these points, some have argued that early patent and copyright laws in England were conflated and tended to be explicated in terms of similar underlying principles of individual creativity and spontaneous manifestations of genius. Later distinctions between patent and copyright doctrines were based on subjective estimations of the quantity and quality of mental labor involved in industrial and literary invention. According to this mode of reasoning, literary and artistic inventions were more deserving of protection than pragmatic industrial inventions, and copyright piracy was regarded as a more egregious offence than patent infringement. This perspective was reinforced by the grant of patents to anyone who paid the fees, regardless of whether or not they were true inventors or mere importers of inventions. Although many Europeans in the 19th century lobbied to repeal patent protection, the same abolitionists would have been horrified at parallel proposals to turn all literary inventions over to the public domain.

European societies were organized in ways that concentrated power in the hands of the elite and facilitated rent-seeking by favored producers, and the organization of invention was no exception. The hierarchical culture of Britain and France was replicated through institutions that promoted the inherent rights and genius of authors and, to a lesser extent, inventors. Intellectual property systems were derived from the grant of privileges or monopoly rights from the Crown, and subsequent grants reflected their provenance. In British law, patents were regarded as "pernicious monopolies," which had to be narrowly interpreted, monitored, and restricted. The legal system was biased against patents in general and incremental improvements in particular. High transactions and monetary costs, as well as the prevailing prejudices towards non-elites, combined to create barriers to entry that excluded the poor or disadvantaged from making contributions to economic growth. Patent fees in England were so costly that they effectively and, indeed, consciously excluded working class inventors from patenting their discoveries. As a result, trade secrecy likely played a more prominent part in protecting new discoveries, diffusion was certainly inhibited, potential inventors faced a great deal of uncertainty, markets were thin, and the rate of technological change may have been adversely influenced.

Clearly, despite these drawbacks, Britain and France still experienced early industrialization and economic growth, but it is also true that their economies were unable to sustain their initial advantage. The case of patents and copyrights suggests that their loss
of competitiveness may have been partially owing to policies that favored elites and deprecate the contributions of the uneducated working class. The British system restricted patent rights in ways that favored capital-intensive industries and unbalanced economic growth patterns. The elite groups who were privileged by these institutions had little inducement to adopt improvements or techniques that infringed on their rents and that, in some cases, had the power to suppress competing technologies. As long as their private benefits were enhanced by such a strategy, they might even have had the incentive to shift the growth path onto a lower trajectory. As an example of this, the British patent system generated surplus revenues to patent agents and administrators who lobbied against reforms. Recommendations such as the introduction of an examination system were rejected in part because they threatened to erode the Royal mandate. Moreover, since creativity and genius are unlikely to vary systematically over time, institutions that are predicated on these factors are unlikely to generate internal reforms that might induce greater inventive activity. Consequently, despite their inefficiencies, the patent rules and standards in both France and England remained essentially unchanged for stretches of over a hundred years. Similarly, the confused state of British copyright grants was rationalized only in 1911, and some have even argued that their present-day copyright laws remain pre-modern. In sum, England and France failed to offer inducements for investments by all potential inventors regardless of their background and privileged the rights of elite producers in a manner that arguably reduced social welfare.

Instead of adhering to the European model, the United States consciously created patent and copyright institutions that were intended to function as the keystone of a democratic society. The Constitution specified that the pragmatic, utilitarian objective of the intellectual property system was to promote the public welfare through additions to knowledge and technology. Patent rights and copyrights were clearly distinguished in separate statutes in 1790 and developed along diametrically opposed lines based on a rational assessment of their costs and benefits. Policy makers in the United States were well aware of the European experience in this and other dimensions. They carefully considered the potential deficiencies of state grants of intellectual property rights, as well as suggestions for alternative strategies that others considered to be superior. They did not shrink from novel approaches they estimated would increase social welfare, regardless of how great the popular outcry, as witnessed by their refusal to recognize international copyrights. Thus, it is implausible to consider the early structure of US patent and copyright statutes and their implementation as haphazard or random; rather, the innovations in these institutions were deliberate and comprised a critical part of a blueprint for a democratic society.

The discussion in this book highlights the contributions of intellectual property institutions in shaping the unique character of US economic growth in the 19th century. Among the leading nations of the day, it was commonplace to acknowledge that patent rights might increase the rate of invention, but it was less conventional to propose that the background or the identity of inventors was irrelevant to their productivity. Although the US Constitution itself fell short of true democratic ideals in many regards, the intellectual property system it authorized epitomized them. The patent system exemplified one of the most democratic institutions in early American society, offering secure property rights to true inventors, regardless of age, color, marital
status, gender, or economic standing. The empirical analysis here explores the extent to which outcomes accorded with these objectives. Who were the individuals contributing to the transformation of technology and society in the United States during this critical period, and what induced them to redirect their attention to creating additions to the existing stock of useful knowledge?

The patterns of patenting, when linked to biographical information, show that the expansion of markets and profit opportunities stimulated increases in inventive activity by attracting wider participation from relatively ordinary individuals. The technical skills and knowledge required for effective invention during this era were widely diffused among the general population. Rather than an elite who possessed rare technical skills or commanded large stocks of resources, the rise in patenting was associated with a democratic broadening of the ranks of patentees to include individuals, occupations, and geographic districts with little previous experience in invention. One finds among the roster of patentees not only engineers and machinists, but also candidates for the Greenback Party, school teachers, poets, humble factory workers, housewives, farmhands, teenagers, and even economists. Scientific American would later proclaim that the United States advanced "not because we are by nature more inventive than other men -- every nationality becomes inventive the moment it comes under our laws -- but because the poorest man here can patent his devices ... In the aggregate the little things -- which in England or on the continent either could not be or would not be patented, owing to the excessive cost of the papers or other onerous conditions -- probably add more to the wealth and well-being of the community, and more to the personal income of the inventor, than the great things do."

The market orientation of the American intellectual property system aided the democratization of invention, because it enhanced the opportunities of non-elite inventors. It is a standard libertarian claim that free markets evolve in tandem with democratic principles. However, the link between markets and democracy is often made in terms of consumer sovereignty or the freedom to choose among competing offers. The analysis here emphasizes the role that patents and copyrights played in the securitization of ideas through the creation of tradeable assets: intellectual property rights facilitated market exchange, a process which assigned value, helped to mobilize capital, and improved the allocation of resources. Access to markets and trade in inventions led to greater specialization and division of labor among inventors and furthered the diffusion of new technologies. Extensive markets in patent rights allowed inventors to extract returns from their activities through licensing and assigning or selling their rights. The ability to transform their human inventive capital into tradeable assets disproportionately helped inventors from disadvantaged backgrounds who lacked the financial resources or contacts that would have allowed them to extract returns by commercializing their inventions on their own.

American democracy, it is sometimes proposed, benefited men at the expense of women, and many women, especially those who lived in rural areas, were excluded from the mainstream of economic progress. Patents do not capture all of the inventions that are created, but this limitation makes it all the more striking that these records indicate that 19th-century women were active participants in the market for technology. The diffusion of household innovations in both rural and urban regions was more pervasive than previously thought. Patents
by women comprised only a small fraction of total patents, but the overall patterns of patenting and the pursuit of profit opportunities by women inventors were similar to those of male inventors. A notable departure from the parallels between male and female patenting was manifested in the higher percentage of rural women who obtained patents, relative to the patterns for men. Women in frontier regions were especially inventive and devised ingenious mechanisms to ease the burden of an arduous existence far from the conveniences of cities and extended social networks. However, even if patent rights were well-protected by the federal courts, state laws also influenced the ability to benefit from innovations. For much of the 19th century, married women lobbied for reforms in state laws that prohibited or hindered their capacity to hold property, engage in contracts, and keep their earnings. Legal reforms in married women's property rights encouraged women to increase their investments in patenting. The barriers to individual initiative that state legislatures initially placed in this and other contexts illustrates the wisdom of maintaining enforcement of intellectual property rights at the federal level.

One of the most interesting challenges to economic historians is to explain changes in the structure and enforcement of property rights. One way in which to do so is through the analysis of legal records, and I assess extensive samples of patent and copyright lawsuits. Courts confronted the continuous stream of mankind about its commonplace business of life and, from these unpropitious materials, created decisions that were based on analogies drawn from historical experience, logic, and the attempt to serve the community in general. The economic history of intellectual property laws and their enforcement leads to the inevitable conclusion that the federal judiciary and the US legal system played a central role in facilitating social and economic progress during the 19th century. I have examined several thousand suits at common law that dealt with major innovations, including canals, railroads, the telegraph, automobiles, and medical technologies. Those records likewise support my argument that the judiciary objectively weighed costs and benefits and that ultimately the decisions that prevailed promoted social welfare rather than the interests of any single group. This is not to say that every judge was of the caliber of Joseph Story or Benjamin Cardozo, but a system of appeals assured that "the tide rises and falls, but the sands of error crumble." There is little support for the notion that judges subsidized economic development by transferring resources from the working class to corporations. Effective policies towards innovations required a social calculus that was far more subtle than a blind promotion of the interests of any one specific group in society. Technological advances altered the costs and benefits of transacting within a particular network of rules and standards, but open and accessible institutions proved to be sufficiently flexible to accommodate these changes.

Unlike England, where the Crown reserved the right to expropriate patent property, in the United States, even federal government claims could not trump the "supreme law of the land." American judges understood that the most effective means to counter oligarchical tendencies was through secure private property rights and market competition. The judiciary in the antebellum period refuted the idea that patent grants required metaphysical inquiries into the quantity of mental labor or the degree of inventiveness. All that was required was that the invention should be new to the world. As for decisions about the utility of allegedly trivial inventions, that was to be determined
by the market, not by the courts. The early judicial optimism about the coincidence between private and public welfare waned somewhat by the second half of the century as equity courts mediated the efforts of patentees to protect national monopolies. A century before the introduction of formal antitrust laws, judges in the courts of equity and the Supreme Court attempted to resolve the paradox of promoting inventive rights without suppressing economic progress through the defense of monopolies. Courts also responded to changes in the nature and organization of technology through legal innovations regarding the rights of employers and the definition of patentable invention among other issues. In short, since the founding of the Republic, legal institutions were modified as the scale and scope of market and society evolved, but the central policy objective of promoting the public interest remained the same. That is, after all, one of the chief virtues of a society that is bound and enabled by prescient Constitutional principles.

The democratization model presented so far highlights the cumulative effect of ordinary patentees attempting to profit in the marketplace from improvements to existing technologies in a manner that supports the predictions of endogenous growth theory. Some scholars argue that these nonspecialized inventors merely created minor improvements that had little impact on total value or on economic growth. They reject the idea that important ‘macroinventions’ were induced by the prospect of economic returns and contend that important inventions were either exogenous or else related to supply factors, such as the number of technically-educated individuals. Kenneth Sokoloff and I co-authored several studies based on biographies of ‘great inventors’ to examine such issues. The record for these ‘great inventors’ dispelled several ‘myths of invention.’ The overwhelming majority of great inventors were also patentees, and their use of the patent system made it easier for them to specialize and extract returns from inventive activity throughout their long careers. Like their less eminent counterparts, most of them had little or no formal schooling. The occupations of great inventors were similarly undistinguished since the majority were artisans, manufacturers, farmers, and others whose jobs did not require technical skills. In sum, one of the most striking features of the records for great inventors is how similar their characteristics and patterns of patenting were to those of ordinary patentees.

The early 20th century is usually characterized as the age of professional, science-based invention conducted by teams in research laboratories. Indeed, during this period, formal college education, human capital accumulation, and financial capital mobilization through corporate ties became more important, but independent inventors from more modest backgrounds were still able to exploit and benefit from the market for invention. At least up to the time of the Second Industrial Revolution, such relatively uneducated inventors or those from rural areas were no less likely to produce valuable inventions. The Second Industrial Revolution was a transitional period that hinted at the changes to come in the nature and organization of technology, but even in the 1920s, American technology reflected the open access highlighted here. For all classes of inventors in the ‘long nineteenth century,’ technological progress in the US involved a process of democratization in response to increases in expected benefits when markets expanded. The American patent system was a key institution in the progress of economy and technology, and it also stood out as a conduit for creativity and achievement among otherwise disadvantaged groups.
The US patent system was soon acknowledged to be the most advanced in the world, and other countries drew causal connections between American achievements and its protection of inventive activity through patent property rights. Sir William Thomson, a British inventor and scientist, attended the 1876 Centennial Exhibition in Philadelphia, which featured displays for Bell’s telephone, the Westinghouse airbrake, Edison’s improved telegraph, sewing machines, refrigerator cars, and numerous other patented discoveries. He stated, “I was much struck with the prevalence of patented inventions in the Exhibition: it seemed to me that every good thing deserving a patent was patented ... If Europe does not amend its patent laws ... America will speedily become the nursery of useful inventions for the world.” Even the Swiss Commissioner to the Philadelphia Exhibition, Edward Bally (a noted shoe manufacturer), urged his own countrymen to introduce a patent system in order to counter the finding that “American industry has taken a lead which in a few years may cause Europe to feel its consequences in a very marked degree.”

However much they praised and emulated the patent policies of the United States, other countries, as well as many American citizens, failed to understand the rationale for its copyright policies. Despite the rhetoric that drew on phrases from 18th-century European philosophy, US rules and standards were not based on esoteric ideas of inherent rights of personhood or creativity, but rather on purely pragmatic and utilitarian grounds. The intellectual property clause of the US Constitution was the common source of both patent and copyright policies, and the same individuals were responsible for their formulation and implementation. Yet, American copyright policies were markedly different from the procedures comprising the patent system. I contend that copyrights differed from patents precisely because the objective of both systems was, in accordance with the Constitutional preamble, to “promote the general Welfare.” This objective required a judicious balancing of private and public interests, the weighing of costs and benefits, and estimations of incentives and outcomes. Interests, costs, and incentives differed across technical inventions (“the useful arts”) and cultural goods (“science”) and also altered over time. The system evolved or adapted endogenously to meet these changing circumstances in a way that contrasted directly with the institutional sclerosis in Europe.

Calibration of different institutional inputs in the United States resulted in significant policy variation across patents and copyrights, assignees and licensees, citizens and noncitizens, as well as producers, competitors, and consumers. Society benefited on net from the creation and commercialization of additions to the useful arts that were induced by profit incentives, despite the temporary inhibitions on diffusion, higher prices during the term of the patent, and the potential effects on cumulative inventions. Thus, to a large extent, the objectives of policymakers and the legitimate aims of patentees coincided. In the case of copyrights, the tradeoffs were regarded with greater concern for three primary reasons. First, many copyrighted items, such as academic research or religious tracts, would be produced even in the absence of financial incentives, because their producers could benefit from ancillary returns, such as enhanced reputations or greater demand for complementary goods. Second, the risk of unwarranted monopolies (which appropriated what belonged to the public and made it private and exclusive) was higher, because cultural goods incorporated ideas that belonged to the public domain in ways that made it difficult to distinguish
between the contributions of the author and those of society in general. Third, and most important, the enforcement of copyright had much more serious implications for a democratic society. Restrictions on free diffusion could result in significant social costs in terms of learning, education, and free speech in ways that promised to bolster and perpetuate the narrow redistributive claims of elites and interest groups.

It is therefore not surprising that in the United States, from the earliest years, copyrights were treated differently from patents. Moreover, US policies departed radically from European intellectual property regimes, which privileged the rights of literary elites above the rights of technicians. While a French parliamentarian would have agreed with US Senator John Ruggles that "inventors and authors stand on somewhat different ground," the ranking of the two groups would have been reversed. Ruggles noted that strong copyrights had important negative implications for the diffusion of useful knowledge "on which depends so essentially the preservation and support of our free institutions." However, he felt patentees should be accorded greater encouragement to create new inventions and also to commercialize them into valuable products. The first copyright statute granted protection to both "authors and proprietors" for the instrumental purpose of learning, whereas only the first and true inventor could claim patent rights. Similarly, for much of the 19th century, work for hire doctrines led to weak employee rights in the case of copyrights but not in the case of patents. Copyrights were administered in a registration system and were overturned if authors did not strictly comply with the rules; patents since 1836 were granted through an examination system and could not be revoked except for fraud. American patent laws have always prohibited compulsory licenses and unauthorized use of patent rights, unlike copyrights, where pervasive "fair use" doctrines allowed free access if such access did not significantly reduce the author's returns, especially in the case of educational materials.

Unlike the intellectual property policies of the European continent, the utilitarian orientation of American democracy supported a patent system that offered strong protections to inventors but required much weaker copyrights. The rhetoric of copyright in France and many other jurisdictions in Europe increasingly centered on the natural rights of creative individuals. Publishers in both France and Britain lobbied heavily for so-called author's rights, because these rights paradoxically redistributed income to publishing interests to a greater extent than to authors. Natural rights expanded in scope until they were enshrined in the international Berne Convention in the form of "moral rights." In contrast, US copyright focused in a pragmatic fashion on the requirements of a developing society based on democratic principles. Although they were concerned with security of property rights, their major objective was not to benefit authors or publishing companies per se, but to increase contributions to knowledge and the dissemination of information. By rejecting the notion of copyright as an inherent and absolute right of creativity, the benefits to a privileged few were circumscribed in order to protect the public domain and to promote the interests of the community in lower costs of learning. To this end, the duration of copyright was among the most limited in the world. Moreover, facts, ideas, and data could not be protected by copyright.

Like other forms of intellectual property laws, the copyright system evolved to encompass improvements in technology and changes in the marketplace. Copyright law
illustrated the difficulties and dilemmas that the legal system experienced in dealing with such new technologies as mimeographs, flash photography, cinematography, piano rolls, phonographs, radio, and “information technology,” including the stock ticker and the telegraph. Even the preliminary decision about whether these technologies fell under the subject matter to be protected by the law created deep conflicts, which were complicated by Constitutional questions about freedom of speech and democracy. Copyright comprised a pervasive right against society, so judges attempted to resolve copyright disputes in ways that reduced spillovers. Consequently, legal innovations expanded beyond traditional copyright doctrines to non-copyright holdings such as unfair competition, trade secrets, and the right to privacy. These legal substitutes maintained bilateral rights against competitors and producers without imposing undue costs on society. The notion of copyright as a means of pursuing and prosecuting large segments of the consumer public was unknown and incompatible with the original copyright doctrines of the United States.

One of the most dramatic proofs of the infusion of cost-benefit analysis in early US intellectual property policy appears in the treatment of international patent rights and international copyrights. A nation of artificers and innovators, both as consumers and producers, American citizens were confident of their global competitiveness in technology and accordingly took an active role in international patent conventions that aimed to strengthen the rights of patentees. As a German judge at the Philadelphia exhibition in 1876 pointed out, “the United States of America already outstripped most of the older nations, except in matters of art, and as art required time, America would eventually not be behind other nations even in that.” Although they excelled at pragmatic contrivances, 19th-century Americans were advisedly less sanguine about their efforts in the realm of music, art, literature, and drama, and this country was initially a net debtor in the flow of material culture from Europe. The first copyright statute implicitly recognized this when it authorized Americans to take free advantage of the cultural output of other countries and encouraged international copyright piracy that persisted for a century. Until 1891, American policies deemed the works of foreign citizens to be in the public domain, because legislators warned that reforms would not benefit the United States. I assess the costs and benefits of copyright piracy and find that Americans likely profited from acting as “continental brigands,” so it is hardly surprising that a century of lobbying only resulted in a succession of failed legislative proposals. It was only when the balance of trade in cultural goods was more favorable to the United States that they finally passed an international copyright law.

The finding that US policies towards patents and copyrights to a large extent conformed with economic conceptions does not imply that outcomes are or will be optimal. The history of copyright illustrates the dangers inherent in a system based on decentralization and democratic social capital, whereby public trust in institutions can perhaps all the more readily be subverted into redistributing wealth and power to a few rather than serving the common good. Copyright decisions illustrate how adjudication by analogy economized on legal inputs and how judges introduced innovations in their interpretation of the law in order to “promote the progress of science;” but, they also reveal the extent to which policies made by judges were constrained by the statutes. Many of the technological innovations of the 19th century were sufficiently different from
existing technologies as to make judicial analogies somewhat strained and ultimately required accommodation by the legislature instead. Thus, the resolution of copyright conflicts drew upon the key institutions of courts, markets, and the legislature, which ideally were intended to provide a system of checks and balances. That balance was initially effective because all parties deferred to the Constitution, but it also highlighted the potential for harm to the public domain if the legislature were captured by interest groups. Those dangers and infractions were always latent and became apparent in American legislation early in the 20th century; since then, copyright doctrine has tended to be formulated through negotiations among industry representatives. It is striking that ever since the 18th century, publishers have lobbied to gain copyrights in perpetuity but were continually defeated by defenders of the public domain, including the judiciary in both Britain and America. In 2003, the Supreme Court of the United States allowed Congress to grant a virtually perpetual copyright in defiance of the Constitution’s stipulation that such grants should only be for a limited time.

Other skeptics no doubt would also question the validity of an economic interpretation of the history of intellectual property or the notion that early American institutions were deliberately designed to increase social welfare and were varied to accommodate changes in external circumstances in accordance with this objective. I adopt a cliometric approach, because quantitative economic history ideally helps to refute the view of history as simply a Rorschach blot for one’s previous convictions. Cliometrics requires the formulation of testable hypotheses and the rejection of untenable claims that are inconsistent with the evidence. If the architects of our nation did not think in terms of the calculator, then we should expect to find policies and outcomes that were inconsistent with economic predictions, inefficient rulings would be reflected in the common law in the form of surges in disputes and litigation, key policy statements that weigh costs and benefits such as those of John Ruggles would be atypical, and comparisons within and across countries would yield few systematic patterns.

Instead, I find that the rapid expansion of markets and national wealth in the United States during the long 19th century was supported by institutions and policies that were designed and interpreted in ways that favored broad-based economic growth. Policy in this area reflected the view that institutions mattered – indeed, institutions in the United States were carefully calibrated to promote social and economic welfare – and that appropriate rules and standards toward the protection of intellectual property were especially important in achieving these ends. Patent and copyright systems in the 19th century were motivated by the democratic belief that everyone, regardless of social status or economic standing, could make a valuable contribution to social welfare. It was felt that individuals would be best induced to contribute to material progress if offered the opportunity to appropriate returns from their efforts through secure private property rights in regards to their intangible assets. In order to achieve democratic ends, patent rights were strongly enforced, whereas the copyright grant was weaker and more hedged with restrictions. Flexible and effective legal institutions played a key role in accommodating and facilitating the radical transformations that industrialization and technological change brought. Finally, the conviction that American democracy should value the contributions and well-being of ordinary citizens led to the conclusion that innovations, commercialization, and improvements in social welfare were best achieved through the decentralized mediation.
of markets rather than through allocations that were based on the values and actions of elites or bureaucrats. Policy makers, therefore, rejected the menu of policy alternatives in favor of patent and copyright systems despite their acknowledged drawbacks. In sum, American institutions during the 19th century created an ambience that encouraged the participation of a broad spectrum of the population and succeeded in motivating relatively ordinary men and women to dramatically expand the existing stock of technical and cultural inventions. Patent and copyright institutions played a central role in ensuring that social and economic development were characterized by a process of democratization.

---

**Call for Papers**

**Clio at ASSA**

**Boston, Massachusetts**  
**January 6-8, 2006**

The Cliometric Society will sponsor three sessions at the ASSA meetings in Boston, Massachusetts, January 6-8, 2006. The program committee consists of Ben Chabot (Michigan), Robert Margo (Vanderbilt), and Werner Troesken (Pittsburgh). Authors interested in presenting a paper should send a one-page proposal, including an abstract or description of the paper, and all contact information to Lee Craig at Csociety@E.H. Net or Lee_Craig@ncsu.edu by May 2, 2005. Please note on the subject line that you are sending a proposal for the ASSA meetings, and either include the proposal in your message or send the documents as attachments in either Word or WordPerfect format. Hard copies may be faxed to Lee A. Craig, Executive Director, Cliometric Society, (919) 515-5613.

We want scholars to be able to read summaries of the papers in advance of the ASSA meetings. Consequently, authors submitting proposals must be prepared to send a 3,000-word summary to the Society office by September 1, 2005. Note that at least one author must be a member of the Cliometric Society.

Proposals due: May 2, 2005  
Authors notified of acceptance of paper: June 15, 2005  
Paper summaries due at the Society office: September 1, 2005  

Lee A. Craig, Executive Director  
Cliometric Society  
North Carolina State University  
Campus Box 8110  
Raleigh, NC 27695-8110

Please email any questions to Lee_Craig@ncsu.edu
Charles Feinstein, 1932-2004

Charles H. Feinstein, the architect of British national income history, passed away on November 27, 2004 at the age of 72. He had returned to his native South Africa in 1999 after retiring from Oxford University. Most recently he was teaching at the University of Cape Town and working on a statistical portrait of the British economy in 1851.

Feinstein was almost single-handedly responsible for estimating the time series that charts the course of British economic development since the middle of the 18th century. He provided Britain with a set of national income and price data that have been virtually unchallenged since their publication beginning in 1972.

In 1958, he published his first estimates of British national income, covering the years 1870 to 1938. This was followed by a massive effort, culminating in his volume published in 1972, National Income, Expenditure and Output of the United Kingdom, 1855-1965.

His next major project demonstrated his ability as an applied economist. With Robin Matthews and J. C. Odling-Smee, he undertook a major study of British economic growth. The result was the 1982 publication of British Economic Growth, 1856-1973. He continued to work on improving British historical data, ultimately extending his work back to the 18th century. In 1988, these results were published as Studies in Capital Formation in the United Kingdom: 1750-1920, which he edited with Sidney Pollard.

Charles Feinstein was born in Johannesburg in 1932. He graduated from Witwatersrand University in 1950 at the age of 18. At the behest of his parents, he qualified as an accountant in 1954 before leaving South Africa for Cambridge, where he completed his doctorate in 1958. He remained in Cambridge until 1978 as a research officer in the Department of Applied Economics (1958-63) and then a University Lecturer in Economics and Fellow of Clare College (1963-78). He left Cambridge to accept the Chair in Economic and Social History at the University of York in 1978. In 1987, after a year at Harvard, he moved to Oxford. In 1989, he began a ten-year stint as the Chichele Professor of Economic History, retiring in 1999.

Among other positions, he served as managing editor of the Economic Journal (1980-86), chairman of the Economic Affairs Committee of the Social Science Research Council (1985-86), and Vice-President of the British Academy (1991-93).

Feinstein was more than just a researcher. In an interview in the Clio Newsletter in 2003, he noted with pride his teaching accomplishments, into which he put considerable effort. Those efforts were apparently appreciated by his students, who reported that he was the best lecturer they had encountered at Oxford.

A Memorial Meeting for Professor Charles Feinstein will be held at All Souls College, Oxford on June 4, 2005, at 2:00 p.m. Details will be published at a later date on EJNews, or contact Avner Offer at avner.offer@all-souls.ox.ac.uk.

Sources:


Oxford University website, http://www.ox.ac.uk/.
M.M. Postan has twice characterized economic history in ways that appeal to me, in one case saying that it is for economists in their dotage, in another that it was produced, like the mule, by cross-breeding between economics and history, though he felt under no compulsion to indicate which of the parents was asinine nor to judge whether the outcome was sterile.\(^1\) I am not disposed to disagree with the first of these put-downs, but would argue that economic history is more fertile than Cartesian economic theory, which often derives its conclusions from its assumptions rather than from facts. My escape from international economics started with a paper in 1951 noting that the responses of European countries to the fall in the price of grain in Europe after 1875 varied more widely than economic theory would have predicted - tariffs or no tariffs,\(^2\) supported three decades later by Stephen Magee's finding that tariff pressures in the United States were pushed by industries, combining land, labour and capital, not by the scarce factor as the Stolper-Samuelson theory would explain.\(^3\) Somewhat later I produced a paper on the bankruptcy of international economics, despite a fairly successful textbook on the subject. I cannot find it on my shelves, nor remember what it said.\(^4\)

Having insulted economic theory, I proceeded to do likewise to economic history spurred on by an editor who wanted to end Economic Growth in France and Britain with a bang. Reacting to the series of mono-causal explanations for growth in one or the other country - coal, exports, technology, mentalities, etc. I produced: Economic history, like all history is absorbing. Beguiling, great fun. But, for scientific purposes, can it be taken seriously?\(^5\) I have since recanted in full and in print. After quoting the passage came: This gave offence, and offence was taken. General equilibrium remains difficult to the point of being impossible, both in theory and in historical problems such as growth. But I now take economic history seriously indeed, and urge a similar born-again attitude on my fellow current and prospective economists.\(^6\)

Economic Growth in France and Britain made a point that is still germane in most history, that mono-causality is an illusion. Most of social sciences involves many necessary conditions but few sufficient ones. Albert Hirschman has a paper ‘Against Parsimony’ that belongs in every economist or economic historian toolkit.\(^7\) It is true that there are models or economic laws with strong historical support that lend themselves to many problems. In Economic Laws and Economic History, I lectured on four ‘laws’ that have a stood up well, but perhaps only in certain circumstances: Engel's law, the iron law of wages (a.k.a. the Arthur Lewis (Marxian) model of growth with unlimited supplies of labour), Gresham's law, and the law of one price that might be ascribed to Adam Smith.\(^8\) Each requires other circumstances. In the Lewis model, an elastic supply of labour holds down wages and holds up profits, but for growth the profits have to be invested productively. H.J. Habakkuk, writing on technology in Britain and the
United States in the nineteenth century, produced an analogue to the Lewis model, in
effect growth with unlimited supplies of land
(in the United States), which required for
growth that labour was highly mobile.9
Today's analogue might be unlimited supplies
of (venture) capital.

I have often quoted Joseph Schumpeter and
Joan Robinson that economics and economic
history require toolboxes with many tools.10
The analyst is required to choose carefully
which tool fits a particular problem, whether
one of understanding a complex situation (or
to satisfy curiosity), or of policy. I especially
am unhappy with Jan Tinbergen's five-step
routine which he holds is the only valid
approach to economic analysis:

1. List the variables involved in the problem
   (this is as far, he asserts, as literary
   economists get);
2. Formulate the relationships assumed to
   exist among the variables;
3. Collect empirical data;
4. Test the assumed relationships until
   statistically reliable results are obtained;
5. Use the model with the estimated
   parameters to obtain optimal policy.11

This strikes me as entirely too mechanical,
with the technique liable to go awry at any
one (or more) of the steps. Important factors
may be overlooked, change with time, or be
unmeasurable. Strong priors may corrupt in
one or more ways, overlooking negative
evidence, discarding results that fail to
confirm the starting hypothesis. Specialisation in
the choice of problems or
the use of tools may well produce increasing
returns, but also run the risk of solidifying
opinions held at the start.

If there were only one technique for solving
problems in economics or economic history,
we would not be left with so many debatable
issues; the standard of living in Britain after
the industrial revolution and the Napoleonic
wars until 1850; the great depression of the
1880s, the causes of the world depression of
the 1930s. At the moment I am engaged in a
debate whether financial bubbles have
existed, or whether financial markets are
always efficient, though they sometimes have
trouble adjusting to policy-switching by
governments.12 This debate is related to a
wider one about the relative efficiency of
markets and governments, in which some
claim that government bureaucrats are
generally self-serving, more interested in
their own positions than in the public good.
This last strikes me as a political position
rather than one about which generalizations
do well. The United States made many
mistakes after World War I over the League
of Nations, reparations, war debts, foreign
aid, but learned from them, I would think, as
evidenced by the Atlantic Charter, Lend
Lease, the British Loan, Marshall Plan, and
other steps in world aid.

Economic history, in my judgment, has two
major tasks, to understand the complexity of
social interaction, satisfying scientific
curiosity, and to test with historical data, to
the extent possible, the various measures
undertaken or proposed to solve economic
problems as they arise. In many questions
there will be no easy answer, or perhaps
many possible answers among which choice
depends on non-economic factors of politics,
culture, the difficulty of effecting change in
institutions or attitudes. As an example, there
is the clash between economic and social
optimal size: for economics it may be the
world, as Robert Mundell said of currency
areas;13 in social terms the optimum is likely
to be much smaller, a unit in which the
individual feels that he or she counts.
Circumstances may determine the outcome.
Subsidiarity, or pushing decision-making
down to the smallest unit may be desirable in
quiet times, for political participation, but must be focused in a central unit in times of crisis. The difficulty, a serious one, is how to move from one pattern to another when circumstances change.  

Neither economics in rigorous formulation nor economic history can solve all or even most problems in society. They help, however, especially in combined form, in which economics is infused with lessons from the past. *Economic History and the Modern Economist*, edited by the late William Parker, and with contributions from Kenneth Arrow and Robert Solow, finds it distressing that more and more graduate training in economics is dispensing with its needed ingredient, history.  

**Charles P. Kindleberger** (b. 12.10. 1910) was educated at the University of Pennsylvania and Columbia University. In the late 1930s/early 1940s he was researcher for the Federal Reserve System and Joint Economic Committee of the United States in Canada. After distinguished war-time service he became advisor on the European Recovery Programme 1947-48. He has taught at many colleges and universities around the world, and was Professor of Economics from 1951, then Ford International Professor of Economics Emeritus from 1976, at the Massachusetts Institute of Technology. He has published extensively on international finance and the international economic order.

---

15 cf supra, note 6.
A Letter from the Editor

Salutations Everyone:

Spring is here at long last. In the state of Wisconsin, the first 60-degree day is generally welcomed with shorts and rollerblades, despite the crisp breeze and occasional 3-foot snow piles, remnants of the last gasp of winter – that 15-inch mid-March snowfall that annually reminds us just who is in charge around here.

Spring is traditionally a time of new beginnings everywhere, and UW-La Crosse is certainly no exception. Students graduate in a few weeks, and many have already accepted new jobs (which does nothing to cure the inevitable “senior slide” problem), new faculty have been secured for the fall term, and new projects are being planned for the summer break. The latter point is what I wish to touch on in this note. By now you should have received an e-mail survey from me requesting some information on your economic history training. More on that in a minute. First let me digress.

As you (hopefully) noticed, the last few issues of the Newsletter have featured a look at the history of economic history. A couple of the articles focused on brief statistical measures of the subdiscipline, while others centered on pioneers in the field. These articles stem from my interest in unearthing the historical roots of economic history.

By dint of the fact that you are reading this Newsletter, you have indicated your interest in economic history. For that reason, I hope that it will be easy to convince you to help me in my efforts to flesh out a fuller story of its evolution. The current portion of my project involves tracing the roots of the education of economic historians. To that end, I am hoping to construct a “family tree.” I am concerned with where they have been trained, who has been training them, what their primary interests are, and how committed economics programs are today to teaching economic history.

In order to help me in my endeavors, I am calling upon you to take five minutes of your time to fill out the survey and hit the reply button to send it back to me. I will compile the results and share them with you in future issues of the Newsletter, and the results will eventually be a part of the EHNet website. This is only part of my ongoing project to write a history of economic historians.

If you did not get an e-mail survey from me but would like to participate, I would be most appreciative. The questions are listed below and should take no longer than a few minutes to complete. You can then send your responses to me at haupert.mich@uw lax.edu.

1. What year did you receive your Ph.D.?
2. What institution granted your doctorate?
3. Who was your major dissertation advisor?
4. What other mentors, if any, do you consider instrumental in your development as an economic historian?
5. What was the title, or topic, of your dissertation?

Thank you in advance for your cooperation and assistance. I look forward to completing this story and sharing it with you in the future. Spring is a great time for new beginnings, and what better way to emphasize that than to take a closer look at our roots and paint a clear picture of our beginnings.

Mike Haupert, Editor