

The Future of Industrial Relations Research: A Young Academic's View*

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By

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Overview of my talk

- The Ausch(1954) conformity experiments demonstrate that what often becomes popular depends on who is going first and how many.
- When and where a certain professor was educated and trained determines in large measure what they will undertake as a field of study for the rest of their careers.
- The technology available at the time their formative education takes place (their 20s) will also be important in terms of the medium used to collect and distribute information. (i.e., UCAL network breaking the stranglehold of journal publishing arms, see exhibit 4 WSJ article)
- The size of each cohort will therefore feedback and set the stage for what is 'popular' by succeeding generations of researchers. Innovation is always possible but that requires "allies".
- Deviation from a norm in academia is more common now and is happening much more quickly in almost every field as the internet makes finding that other 'lone voice' or ally easier.
- Based on this model what can we say about the next 10,15,20 years? The future of social science research will be a more varied and hard- to- pin -down kind of place. Well suited I think to IR librarians who specialize in interdisciplinary questions and approaches.

* The author wishes to thank Danielle Lamb for her helpful research assistance.

The Future of Industrial Relations Research: A Young Academic's View

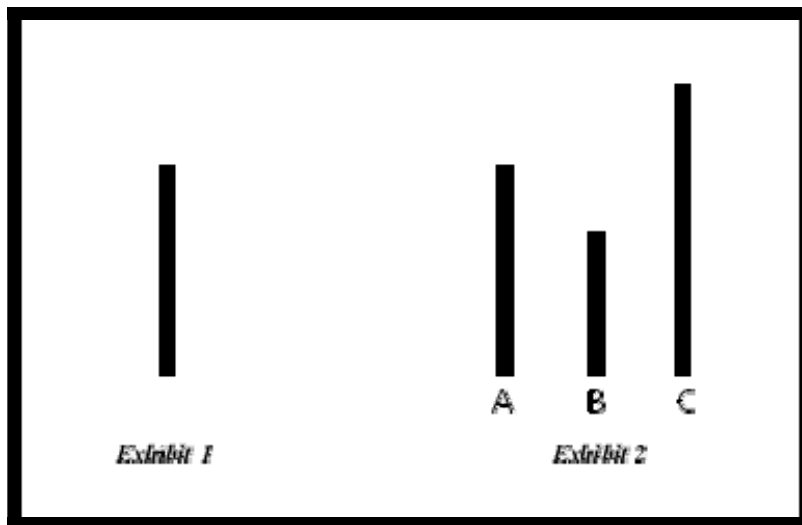
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Just as a preliminary note of introduction, the "future" I am referring to in this talk is one that has to do with both the content and medium of Industrial Relations research. By this I mean the subject matter of the IR/Labor economics discipline in the next twenty or thirty years. What kinds of questions and topics will be important and how will researchers seek out information and disseminate their findings to a wider audience?

I would like to begin by referring to the Asch experiment - specifically, the diagrams in exhibit 1 below.



The first line in exhibit 1 is arranged so that it is ~~is~~ noticeably the same length as one of the other three on the right. Yet, under certain conditions, people who look at these lines sometimes pick the wrong line to match on the page. Why would this be the case?

In 1951 social psychologist Solomon Asch devised this experiment to examine the extent to which pressure from other people could affect one's perceptions. In total, about two-thirds of the subjects who were placed in this situation went along with the clearly erroneous majority.

Asch showed bars like those in Exhibit 1 to college students in groups of 8 to 10. He told them he was studying visual perception and that their task was to decide which of the bars on the right was the same length as the one on the left. The task is simple, and the correct answer is obvious. Asch asked the students to give their answers aloud. He repeated the procedure with 18 sets of bars. Only one student in each group was a real subject. All the others were confederates who had been instructed to give incorrect answers on 12 of the 18 trials. Asch arranged for the real subject to be the next-to-the-last person in each group to announce his answer so that he would hear most of the confederates incorrect responses before giving his own. Would he go along with the crowd?

To Asch's surprise, 37 of the 50 subjects conformed to the majority at least once, and 14 of them conformed on more than 6 of the 12 trials. Asch was disturbed by these results: "The tendency to conformity in our society is so strong that reasonably intelligent and well-meaning...people are willing to call white black. This is a matter of concern. It raises questions about our ways of education and about the values that guide our conduct."

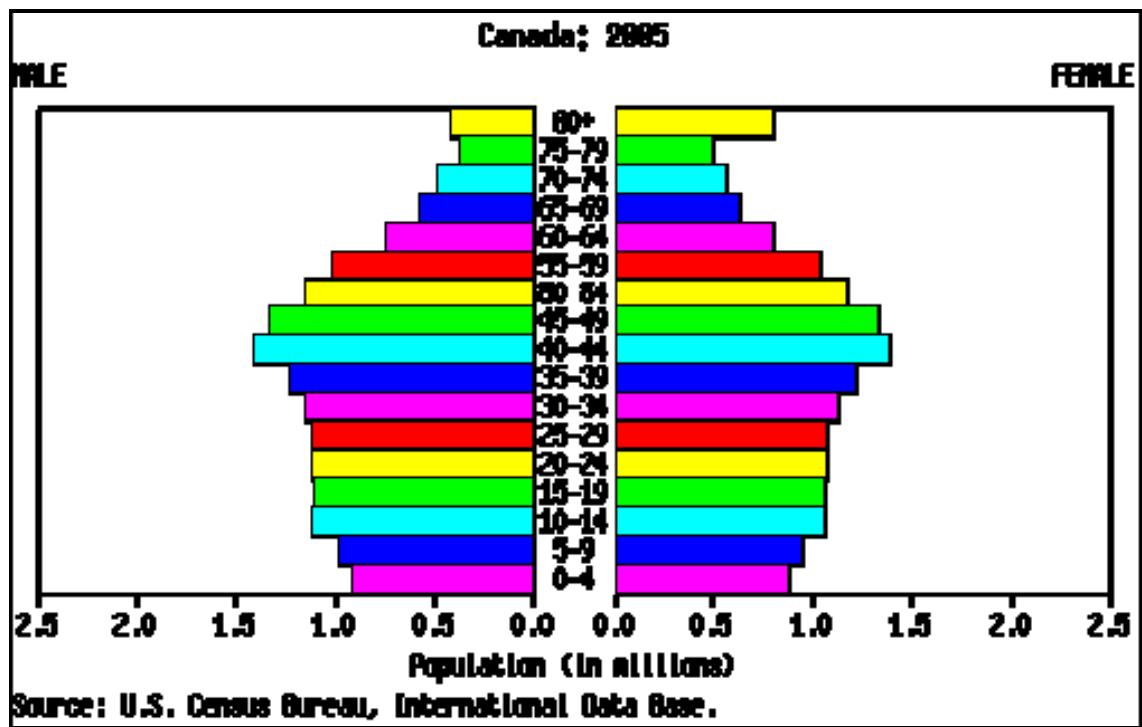
People conform for two main reasons: because they want to be liked by (and fit in to) the group and because they believe the group is better informed than they are. There are also instrumental reasons, there are costs to deviating from the norm. The second set of explanations are favored by economists because they rest on an efficiency foundation (i.e. it is cheaper to conform or allow others to do the searching for you).

The question is: "what does this have to do with the future of IR research and the IR librarians' association?"

I would argue that major trends in social science are often shaped by a group of people who are dominant (by their sheer numbers or by their preeminence in the field). In the Asch experiments, Asch could reduce the size of the group of confederates and still get subjects to conform, so long as the confederates in the study were known to be A+ students.

The point of relevance here is that we follow those who we deem to be leaders in a field.

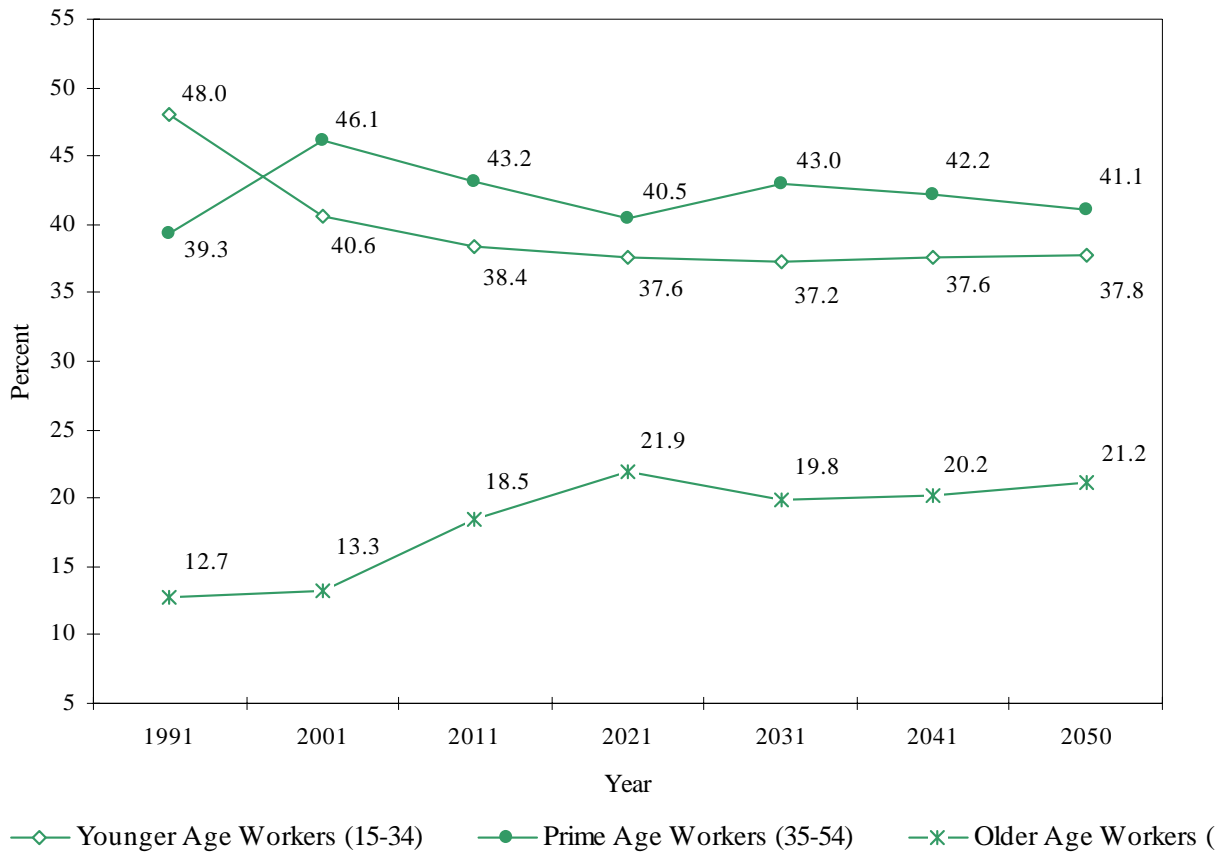
Who in IR/LE is dominant or considered a leader at the moment? I would like to identify a group or cohort of researchers using population pyramid for Canada in 2005 (similar to that of the U.S. in Exhibit 2 below).



One can see that the pyramid is looking more and more like an hourglass, with a tapering base. If one divides, rather crudely, the working age population from 15-65 into two equal halves, one finds that the 15-39 year olds and 40-65 year olds are unevenly divided. There are significantly greater proportions of older workers (40+) in North America than younger workers. In fact, looking at Exhibit 3 below, one can see the growth of

differing age categories of workers over the next fifty years will differ significantly in Canada.

Exhibit 3



Now if we go back for a moment to the Asch experiment and combine what we know from that, with these two pictures what do we get?

If we know that the size of the group going before you matters in terms of conformity and compliance, then we may conjecture that the concerns of those aged 40 plus will dominate

the agenda for the next twenty years or so, even among the followers. This is true not only in IR but in a wider set of fields as well.

But we are getting too far ahead of ourselves. Let's use these two ideas to construct a more all-encompassing framework of what IR research will be like in the next twenty to thirty years.

I have often observed that a Professor's wardrobe ends up being a time capsule of what was in fashion at the time that their PhD's were conferred. This is not surprising as this was likely the last time they had time to purchase clothes and look good for their future spouses. Once married and tenured there is no longer a need to wear something in style.

In a similar way, what Professor's and researchers more generally end up studying and conducting research in (and how they do their research for that matter) is a reflection of the forces that were at play while the graduate student version of that Professor was finishing his or her thesis.

This explains, in part, why topics that lose their practical relevance in the real world continue to have a life in the academic world. So, for example, I asked my research assistant to do a key word search of 6 North American (and one British) IR/ER/LR/Labour economics journals in order to categorize the frequency of certain key words at three intervals

1984, 1994 and 2004. Although still not finished, some of the results were surprising.

Take a key word like Collective Bargaining (CB). Despite a four-decade long slide in its incidence in the US, the term actually rose in its frequency of use between 1984 and 1994. The last decade has been less kind to CB, but it is still one of the most dominant key words you find in all of ER/IR, but its frequency has fallen by nearly 50 percent since 1994.

So who is writing about CB despite its gradual disappearance from the IR landscape? I hazard a guess (because this part of the analysis I am in the process of doing), but the majority of writing on this topic is done by those researchers for whom CB was a dominant concern at the time that their formative education was taking place (i.e., the 1960s and 1970s). And who are these people? People born in the 1940s and early 1950s, who would be roughly 50-65 now. Go back to the pyramid, they are the front wave of the baby-boom. The drop in CB had a lag, but it is to be expected as their numbers and dominance are replaced by the next cohort of researchers who had other concerns in the formative years of their education.

And how did the front end baby-boomer researchers use information? They grew up with card catalogues and relied heavily on print archives. They now use electronic information to be

sure...but they want to use it in the "style" of what came before. Technology has to have the 'look' and 'feel' of older technology.

This is perhaps one reason why the Blackberry PDA has been so successful. It, with its miniature keyboard and screen, replicated in a small form the computer that we all use. Whereas past PDA's were trying to make users adapt to a new system of portable information technology. Technology became simple because it *had* to become simple for this leading cohort of users.

Perhaps now we can begin stating the names of this group. Morley Gunderson and the late Noah Meltz from CIR, Tom Kochan at MIT, Richard Freeman at Harvard/LSE, Richard Hyman at LSE, Joel Rogers at Wisconsin, Morris Kleiner at Minnesota are just some of the names we associate with this cohort.

Who's replacing the 50-65 year old IR cohort as the establishment of IR / Labour economics research? The 35-to-49 age group (this is the peak time for a publishing author). When were they schooled at university? The 1980s were times of change in IR and also a growth of computer technology in a way that differed for the generation previous. They were the first to have access to personal computers rather than mainframes at the university. They are more likely to rely on a portable office and want access to information quickly.

Their IR/Labour economic concerns relate much more to non-union phenomenon and also to international themes and comparative

work. The explosion in the availability of data (both global and micro-foundation) has created a whole set of new opportunities for these researchers (some of the most notable being Doug Hyatt and Anil Verma at U of T, Daphne Taras at U of Calgary, David Card at UC Berkeley, David Marsden at LSE, Bruce Kaufman at Georgia, Thomas Lemieux at UBC, John Budd at Minnesota). They have been creative in their choice of methodology and also concerns. This cohort has another 20-25 years ahead of them and they will shape the near future of IR/Labour economics disciplines, both because of the stage they are in their careers (they will soon be directors and deans of programs and schools) but also because of their sheer numbers. Looking at the population pyramid again, they constitute the largest cohort in sheer numbers.

The current young generation of researchers 25 to 34 year olds (of which I am one and hence the title of this talk) is the medium to long range future of the discipline. Unlike their two cohort predecessors, they are the least likely to find traditional disciplinary boundaries very interesting. The cohort previous, although they began to break down the neo-classical stranglehold of their predecessors, were still doing work which could be conveniently fit into the constituent disciplines that form IR research (i.e., economics, sociology, psychology, history, political science or law).

But if one looks at the last few Nobel prize winning economists or the winners of the JB Bates medal for economists under 40, they have been won by academics doing work that defies traditional classification. Mathew Rabin and Steven Levitt have been the last two winners of the Bates medal and a perusal of the titles of their papers speaks volumes for the new (less ideological and more open spirited) approach to research. And unbeknownst to me...Steven has beat me to the punch with his latest article

- "An Examination of the Influence of Theory and Individual Theorists on Empirical Research in Microeconomics." Forthcoming, *AEA Papers and Proceedings*, May 2003. (with Pierre-Andre Chiappori).
- ["Catching Cheating Teachers: The Results of an Unusual Experiment in Implementing Theory."](#) Forthcoming, *Brookings-Wharton Papers on Urban Affairs*, 2003. (with Brian Jacob).

Steven has just proven my more general point: we, as scholars and researchers, often come up with similar ideas because we are exposed to the same influences in those formative stages of our careers (our early twenties, which means the early to mid 1990s for Steven and me).

Now in the last stage of my talk I would like to say just a few words of my own style of research, which could be emblematic of the next wave of IR research. I also want to say a few words of how I think IR/ER, as a field within the domain of

information research, may benefit from the breaking down of disciplinary approaches and acceptance of heterodox questions and topics even in a field like economics.

I rarely if ever enter a large institutional library any more. Now, this may be a function of having research assistants that do this for me but I somehow doubt it. Because I do use the services of the CIR library at the University of Toronto. I realize why I do so. I get tailored answers to my questions (which can sometimes be very idiosyncratic). The reason I go to the Centre library, as opposed to any other, is because they know me and because it is an IR library. And IR prides itself on being pluralist and interdisciplinary. Staff at the library have a working (and in many cases expert) knowledge of enough disciplines which touch on the kinds of questions that current "young" researchers do work in. This is good for IR/ER and good for me!

The point is, just as we form path dependent habits with regards to *what* we end up studying later in life, we also develop those same habits in terms of *how* we study and use information. In the parlance of management theory, this is known as relationship marketing. The relationship creates a bond which makes the costs of switching or changing for the user higher than they would otherwise be without that relational understanding and investment.

Finally, we should look at exhibit 4. It is taken from an article which many of you may have seen in the Wall Street Journal: "Peer Pressure: Scholarly Journals Premier Status Is Diluted by Web".

The article describes how two forces may change publication in academia. A financial pressure from universities and a scholarly pressure to get newly released papers out quickly. I'm not sure if this will become the mega-trend for the discipline. After all, it was the older cohort that demanded technology look like old technology and they got it. The newest generation (those younger than me) have grown up reading from computer screens and it may be that the on-line journal publishing, which by-passes a lot of the paper and peer review process, may be the 30 to 40 year trend. But I don't think we're there yet.

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Exhibit 4:

Peer Pressure Scholarly Journals' Premier Status Is Diluted by Web

More Research Is Free Online Amid Spurt of Start-Ups; Publishers' Profits at Risk

A Revolt on UC's Campuses

By BERNARD WYSOCKI JR.

Staff Reporter of THE WALL STREET JOURNAL

May 23, 2005; Page A1

BERKELEY, Calif. -- From a stool at Yali's café, near the University of California campus, Michael Eisen is loudly trashing the big players in academic publishing. Hefty subscription fees for journals are blocking scientific progress, he says, and academics who think they have full access to timely literature

are kidding themselves. "They're just wrong," Dr. Eisen says. He suggests scholarly journals be free and accessible to everyone on the Web.

This may sound like the ranting of a campus radical, but Dr. Eisen is a well known computational biologist at a nearby national laboratory and a Berkeley faculty member. He is also a co-founder of a nonprofit startup called the Public Library of Science, which produces its own scholarly journals, in competition with established publishers, distributed free online. It's a campus twist on a raging Internet-era debate about who should control information and what it should cost. For decades, traditional scholarly journals have held an exalted and lucrative position as arbiters of academic excellence, controlling what's published and made available to the wider community. These days, research is increasingly available on free university Web sites and through start-up outfits. Scholarly journals are finding their privileged position under attack.

The 10-campus University of California system has emerged as a hotbed of insurgency against this \$5 billion global market. Faculty members are competing against publishers with free or inexpensive journals of their own. Two UC scientists organized a world-wide boycott against a unit of Reed Elsevier -- the Anglo-Dutch giant that publishes 1,800 periodicals -- protesting its fees. The UC administration itself has jumped into the fray. It's urging scholars to deposit working papers and monographs into a free database in addition to submitting them for publication elsewhere. It has also battled with publishers, including nonprofits, to lower prices.

"We have to take back control from the publishers," says Daniel Greenstein, associate vice provost for the UC system, which spends \$30 million a year on scholarly periodicals.

The clash between academics and publishers was exacerbated last year when the taxpayer-funded National Institutes of Health proposed that articles resulting from NIH grants be made available free online. That prompted protests from Reed Elsevier, John Wiley & Sons Inc. and several nonprofit publishers such as the American Diabetes Association, which argued such a move would hurt their businesses.

The NIH retreated and in February made the program voluntary. It now asks authors to post on an NIH Web site any articles based on NIH grants within 12 months of publication.

The debate comes at a time when it's easier than ever to find scholarly articles by using simple Internet tools such as Google. In late 2004, Google Inc., in Mountain View, Calif., launched Google Scholar, a free service that can search for peer-reviewed articles as well as theses, abstracts and other scholarly material, much of it in scientific fields.

Traditional publishers argue that the expensive process of selecting and editing journals is a necessary filter to help scholars sift through vast amounts of research. The nonprofit publisher of the prestigious Science magazine makes content

available free after 12 months. Other publishers note that with a combination of free abstracts, free distribution to the developing world and public-library subscriptions, much of the globe already has access to what they produce.

"The vast majority -- 90% of researchers in the world -- have access online to our material," says Karen Hunter, senior vice president at Elsevier, the science and medical division of Reed Elsevier that publishes the company's journals. Elsevier's scholarly journals bring in about \$1.6 billion in annual revenue with an operating-profit margin of about 30%.

Publishers have been entrenched in academia for decades. One big concern, the U.K.'s Taylor & Francis Group, now part of T&F Informa PLC, was founded in the 18th century. The venerable nonprofit Science was founded in the 1880s by Thomas Edison. The industry became firmly established in the 1950s and 1960s in the wake of the Soviet space program, whose success spurred a wave of scientific publishing.

Although learned societies such as the American Physical Society hold sway at the top of the prestige pyramid, commercial publishers have created a second tier, producing thousands of niche periodicals from Addictive Behaviors to Zoology, both Elsevier titles. Scholars are generally grateful that publishers take the risk of starting new titles, which often take years to break even.

The publishers' prestige derives from the rigorous system of peer review, in which a journal's editorial board will select experts in a field to vet articles. At some top scholarly journals, less than 10% of submitted articles make it into a publication. In turn, the peer-review system lends authority to a scholar's work, and has long been a springboard to academic advancement.

Aaron Edlin, a UC Berkeley professor of law and economics, is a co-founder of Berkeley Electronic Press, publisher of 25 online scholarly journals. His playbook is simple: undercut giant rivals with lower prices -- around \$300 -- faster turnaround and Internet-only distribution. Yet when Dr. Edlin helped write a paper on game theory recently, he submitted it to the competition, the Journal of Economic Theory, published by Elsevier.

The reason: Professor Edlin's co-author on the paper is striving to win tenure at the California Institute of Technology and needs exposure in big-name journals. "He thought it was important. I respected his decision," says Prof. Edlin.

The peer-review system has many defenders. "There's too much stuff out there, and we are all way too busy," says Lee Miller, a retired professor of ecology at Cornell University and editor emeritus of the nonprofit journal Ecology, published by the Ecological Society of America. "Anything that saves you time and leads you to the most important work is helpful."

In the 1990s, the commercial industry consolidated. The biggest publishers began buying or building new journals and raising prices. That edifice only began to be challenged with the rise of

the Internet, which cut distribution costs and triggered a wave of experimentation in what is called "open access" publishing. In London, a for-profit startup called BioMed Central publishes more than 100 scholarly journals available free to the public via the Internet. BioMed Central charges individual authors a processing charge of about \$850 but doesn't charge it for authors affiliated with member institutions. BioMed Central says it has 527 institutional members, including British and American universities, which pay between \$1,700 and \$8,600 a year to belong.

In the U.S. a powerful open-access advocate has been Harold Varmus, a Nobel laureate, former UC scholar and former NIH director. He's now head of Memorial Sloan Kettering Cancer Center in New York. He co-founded Public Library of Science with Berkeley's Dr. Eisen, backed by a \$9 million grant from a private foundation. Charging authors a fee of \$1,500, the group launched its first peer-reviewed journal, PLoS Biology, in 2003, and also distributes its contents free on the Internet.

In the late 1990s, Dr. Eisen was studying the yeast genome, a booming field that has a large overlap with the human genome and 200 journals publishing related research. He wanted all these journal articles freely available at his fingertips, an impossible request because many are behind subscription barriers. Some scholars think publishing should operate like the Linux computer operating system, where programmers build on each other's work in an ongoing, collaborative project. In the scholarly realm, a database called arXiv -- pronounced "archive," as if the "x" were the Greek letter "chi" -- has become a repository of scholarship in the physics field. It's owned and operated by Cornell University and partially supported by the National Science Foundation. If the UC administration has its way, something like that would be the norm throughout academia. To experienced publishers, much of the open-access talk seems naive. "A lot of this is self-righteous talk," says Alan Leshner, executive publisher of Science and chief executive of its nonprofit parent, the American Association for the Advancement of Science. He says giving away content isn't a viable business model because of the tremendous costs of putting out reputable journals.

He notes that Science gets 12,000 submissions and publishes 800 articles a year on a \$10 million editorial budget. That averages more than \$10,000 per published article, a high number because of the costs associated with handling the unusually large number of submissions the journal receives. Industry experts say typical per-article costs are between \$3,000 and \$4,000.

If open access takes off, information will flow faster, but publishers will make less money. Among those who would be hurt is Reed Elsevier. Sami Kassab, analyst at investment house Exane BNP Paribas in London, estimates that such a movement could sharply cut the company's profit margin on periodicals to between 10% and 15% of revenue, from the current 30% or more.

Currently, the open-access movement makes up between 1% and 2% of the market, experts say. While that number seems small, the concept is assuming an important role channeling academic discontent.

"There's a lot of sentiment that work is being taken advantage of by the commercial publishers," says Alessandro Lizzeri, associate professor of economics at New York University and editor of Elsevier's Journal of Economic Theory. He says that while editors get little compensation for their work, authors and reviewers -- aside from prestige -- usually get nothing or just a nominal fee. Prof. Lizzeri says that two of the 40 members of his editorial board resigned recently because the journal isn't free to readers. "If half the board resigns I'm in trouble," he says. These rumblings hit the University of California early on. In October 2003, faculty members made a rare display of solidarity with the university administration. Two scientists at the University of California at San Francisco staged a protest over a \$91,000 bill from Elsevier's Cell Press unit for one year's access to six biology journals. The two professors called for a world-wide boycott, urging fellow scholars at UC and beyond to refuse to serve as authors, editors or peer reviewers at the six periodicals in question.

Their timing couldn't have been better for the university administration, which was just about to begin negotiations with the Reed Elsevier unit over a new contract. In the late 1990s, all UC campuses had banded together into a single buying consortium. In 2002, the university hired Dr. Greenstein, a history professor turned expert on digital libraries. With the state of California's budget crisis forcing him to trim library spending to \$62 million a year, Dr. Greenstein wanted to take a hard line.

"It was the opening shot, really, in struggling head-on with this world of scientific publishing," says Keith Yamamoto, executive vice dean at UCSF medical school and one of the boycott's leaders.

The university was paying Elsevier \$10.3 million a year for print and online subscriptions to most of its 1,800 journals. The university demanded a 25% reduction and at one point threatened to walk away from the table.

As the negotiations grew tense, faculty at other UC campuses started to chime in sympathetically. The UC Santa Cruz faculty senate passed a resolution urging faculty to boycott Elsevier journals by refusing to submit articles or to serve on periodical boards.

"That alarmed us," says a Reed Elsevier spokeswoman in Amsterdam. More than 100 UC faculty members serve as senior editors of Elsevier journals and about 1,000 serve on editorial boards. The publisher fanned out across the campuses, drumming up support among friendly faculty with breakfasts and other meetings. The spokeswoman says the company concluded that most UC faculty members didn't know about the boycott call or didn't support it.

The negotiations dragged on for two months and grew testy. In late 2003, the university won a 25% price reduction to \$7.7 million a year for 1,200 Elsevier periodicals. Elsevier agreed to throw the six biology journals into the deal.

"They got a very, very good deal," acknowledges Reed Elsevier's Ms. Hunter. She says the company got some concessions, too. UC gave up access to several hundred periodicals, for example. UC says Elsevier unilaterally added the titles into the arrangement before negotiations started and says it doesn't care about their removal.

Suddenly, the UC negotiation was the buzz of the academic library world and an inspiration for others to follow suit. One UC librarian, Catherine Candee, says a university negotiator elsewhere "called us up and said, 'Thank you, you saved us \$1 million.' "

