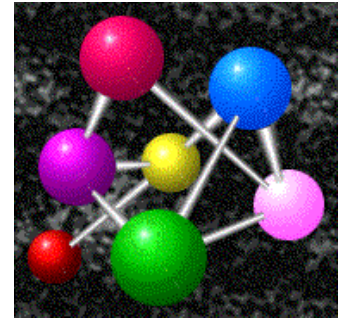


Ties & Bonds



Ties & Bonds is a regular column written by Barry Wellman. The contents of this column are solely determined by Barry Wellman and do not necessarily reflect the opinions or concerns of INSNA. Contact Barry at wellman@epas.utoronto.ca.

BBS

Married: **Nancy Howell**, *The Search for an Abortionist*, *Demography of the Dobe !Kung*, and **Andre Gunder Frank**, 40 pp. dependency theory pub. list too long to summarize (both Soc, U Toronto), 27 Nov 95, after a courtship of 38 years and an announced engagement of 20 hours. Barry & Bev Wellman were the witnesses, so it's an official network wedding..... **S. Leigh Star** has moved from Soc to Library/ Info. Science at U Illinois.... **Karen Cook** is now the James Duke Prof, Soc, Duke U.... **Rob Kling** moving from Cal-Irvine to head a shop at U Indiana - Info Sci, summer/ 96.... **Mark Mizruchi** now Assoc. Ed. of *Administrative Sci Q*.... **Leah Lievrouw** has moved from U Alabama to Library & Info Sci, UCLA.... **J.D. Eveland** now at Calif. Schl of Prof Psychology.... **Larissa Lomnitz** (UNAM, Mexico) is at Soc, U Chicago till 6/ 96.... **Jeanine Anderson** now an Anthro prof at Pontifical Catholic U of Peru, Lima. **Aldo Panfichi**, formerly of New Schl, is a Soc prof at Pontifical Catholic U of Peru.... (for more on Lima, see my article below).... **Kate Browne** (Anthro, Colorado St U) off to fieldwork in Martinique 5/ 96 (nice venue if you can get it) **Charles Tilly** moving uptown from New School to Soc, Columbia U, Summer 1996. He's spending Feb-June/ 96 at Soc, Stockholm U, tilly@sociology.su.se....

Meanwhile **Harrison White** (Soc, Columbia) is spending his spring, 1996 sabbatical at LASMAS/ IRESCO-CNRS, 59 rue Pouchet, 75849, Paris....

....INSNA Coordinator **Steve Borgatti** to remain at Carroll Graduate School of Management, Boston College (where he's now on sabbatical from U So Carolina).... **Endre Sik** (Budapest U) spending 4-5/ 96 at Neth Inst of Advanced Studies, Wasenaar (an idyllic locale).... Among the structural analytic prizes given out in 1995 by sections of the AmSoc Assoc are **Carole Heimer**, Best Theory paper, "Doing Your Job & Helping Your Friends" (no venue given); **Kim Voss**, Best First Pol Soc book, *The Making of American Exceptionalism*; Cowinners of Pol Soc's Contributions to Scholarship awards are **Ron Aminzade**, *Ballots & Barricades* (Princeton UP, 1993) & **Craig Calhoun**, *Neither Gods nor Emperors* (U Cal Pr, 1994); **Vern Bengtson** won the Aging section's Distinguished Scholar Award.... **Susan Gonzalez Baker**, back from Spanish sojourn, is now Asst Prof of Soc, U Texas-Austin: sbaker@prc.utexas.edu.... **Bryan Roberts** (Soc, U Texas) has recently received a large grant to study entrepreneurship on both sides of the US/ Mexico border - if they study the real entrepreneurs, sounds like a good way to get killed.... **Ray-May Hsung** (Soc, Tunghai U, Taichung, Taiwan) will spend a year at Soc, U Bielefeld, Ger.... The next Taiwan national social survey will have network questions: Nan Lin & Ray-May Hsung are among those involved....

....**Wally Clement** (Soc, Carleton U) & **John Myles** (Soc, Florida St. U) have won the Cdn Soc & Anthro Assoc's 1995 Harold Innis prize for their book, *Relations of Ruling: Class & Gender in Postindustrial Societies*.... Former *Connections* Assoc. Ed. **Scot Wortley** has completed his doctorate at Soc, U Toronto and is staying close to home to become Asst Prof, Crim. Ctr, U Toronto. Thesis title: "Social Networks, Social Support and Substance Abuse" [We censored the subtitle: "Behind the Scenes at the Sunbelt"].... **Caroline Haythornthwaite** (our student at Info Sci, U Toronto) to become Asst Prof, Info Sci, U Illinois, 8/ 96.... **Nancy Nazer** (Soc, Toronto) has won a prestigious 3-year SSHRCC Fellowship.... Hanna Lehtimaki Rantavuo has had her licentate (mini-doctorate) thesis accepted by the Bus Schl, Tampere U, Finland. Based in Toronto, she studied the networks of American and Canadian units of a Finnish multinational (not the NHL!)....

....**Ron Rice** (Comm Sci, Rutgers) visiting Utah on sabbatical through July, 1996. His address is 2689 Chadwick St., Salt Lake City; tel: 801-485-7734; email remains the same.... **Risto Alapuro** (Helsinki U) will be at U Minnesota, 8-12/ 96.... **Kathryn Dindia** becomes pres of the Int'l Network for Personal Relationships, 7/ 96, replacing **Steve Duck** who steps down after founding/ heading this network for many years.... **Margaret Somers** (U Michigan) recently won a political sociology section award for "Law, community & political culture in the transition to democracy," *ASR* 58, 10/ 93. It explores regional differences in 18th century England linking community networks to contrasts in rural production, family patterns and authority relations.... **Lynn Smith-Lovin** (Soc, U Arizona) is co-editing *Social Psychology Quarterly* (with Linda Molm).... **David Schneider** (Anthro, U Chicago) died 30 Oct 95 at his Santa Cruz retirement home.

OOPS: In the last issue I mistakenly reported that **Mark Granovetter** had moved to

the Stanford Business Schl. Mark writes that he is 100% with the Stanford Soc. Dept. Guess I'm getting my weak ties confused with my structural holes....

CLYDE MITCHELL IS DEAD

I regret that J. Clyde Mitchell, one of the founders of our field, died 15 Nov 1995. In my view, Clyde did more than any other person to put network analysis on the map through his own work and leadership, and he kept working seriously in the field throughout his life.

In my last column, I told about how Clyde had not been well at our 7/ 95 London conference but had bounced back a few days later to spend a happy weekend with Bev and me at Stratford and his Oxford home. He chortled when he showed us his old home movies from Rhodesia, where he and his kids put on a farce he had scripted.

Clyde was busy at work the rest of the summer writing a review for the adult education course on the theatre he was taking of Chekhov's "Uncle Vanya" which we had seen at Stratford. Amusingly enough, given his prodigious sustained output, Clyde had writer's block on this, and he and I spent late July emailing about how to trick himself past it.

Clyde had been reported "dying" since the time over a decade ago when I edited/ published *Connections*. In fact, it had become a mild office joke that Clyde was threatening death again in order to queue jump and have his stuff published in the very next issue. Until this time, Clyde always got better and went on to write interesting stuff, have good conversations, and participate actively in some conferences. I was especially impressed by the way he kept crunching data and avoiding reverting to Oxford retired punditry. Clyde was a demon e-mailer, and was always generous with advice and support to all comers.

Unfortunately, Clyde had a stroke in Sept and he never really rallied. Although the official cause of death was heart attack/ stroke, he just plain ran down. But I will treasure the times we had since Clyde graciously entertained unknown me at Nuffield, Oxford during my English sabbatical year, 1974-1975. Why, he even took me to High Table!

I've recently heard from his wife Jean Mitchell, who misses Clyde very much. She reports that Nuffield College, Oxford recently held a memorial meeting for Clyde. She's donated his journals [including *Connections*] to Nuffield and his African papers to Rhodes House, an ironic thing as Clyde once was most unwelcome in colonial Rhodesia. Jean would be delighted to keep in touch with his friends and admirers. Her email address is jetchell@sable.ox.ac.uk. Her postal address remains: 25 Staunton Road, Headington, Oxford, UK OX3 7TJ.

DOING CHARLESTON

I don't know about you, but I had a great time at the Charleston Sunbelt conference, 2/ 96. Maybe it was that the Sunbelt finally lived up to its name; maybe it was the graciousness of the city (if you managed not to notice the absence of racial integration); maybe it was Bonnie Erickson's lovely keynote; certainly it was Katie Faust, John Skvoretz & USC students' calm, thorough organization; certainly it was the general high quality of the papers (best ever, I thought, although more normal science than breakthroughs). It was also nice seeing generational turnover. Having singlehandedly founded INSNA (and *Connections*) exactly 20 years ago (and I even owned it as a small business, because there were less start-up hassles that way), I was thrilled to see what a stable institution it has become.

Here's an appraisal of the meeting that may not have come out the way the writer intended. It's from a note to Bonnie Erickson,

who gave the keynote address: "Dear Bonnie, ... Your thoughtful and provocative discussion of the structure of ignorance set the tone for a very enjoyable meeting."

Best story I heard in Charleston: When Bev & I visited Kahal Kadosh Beth Elohim (the oldest Jewish congregation in the U.S.), we learned that the Charleston police chief's name is Reuven Greenberg. A Jewish police chief is rare enough (outside of Israel), but Reuven is big and black, the product of a mixed marriage a few generations ago. We were told he has a Ph.D. in criminology. Seems like a cool guy. Whenever the white racist Ku Klux Klan wants a police permit to march in Charleston, he gives it to them, but insists that the marchers be surrounded by the biggest, blackest police officers available in full uniform. Kind of a neat way of making a point peacefully.

The congregation itself is interesting. Even though I think of the South (sans Tom Watson) as socially-conservative, it was the 1st American Jewish group to join the "Reform" movement in the early 1800s. A sign on the rabbi's driveway reads, "Thou Shalt Not Park Here." And one Biblical saying on the wall reeks of kinship support: "How Good and How Pleasant That Brothers Dwell Together" [Psalms 133:1].

SAVE THE SUNBELT !!!

Those of you who read the SocNet email network may have read a piece, 4/ 96, by an English network analyst suggesting we get rid of the "Sunbelt" name in our annual conference. The thought was others didn't take us seriously enough with such a name. Next, they'll want to eliminate our noon-3PM networking/ suntanning tradition! Indeed, if you believe in self-fulfilling prophesies, this may also be an attempt to inflict English weather on us. Indeed, I just discovered that my UK-based *Word Perfect* spell checker doesn't even know about suntanning.

I disagree, most vigorously, and judging by the comments online, I am not the only one. I've never felt this as a problem. To the contrary, it is a distinguishing mark of our loosely-knit network and as such stands out favourably in the minds of the folks I speak with. Moreover, it expresses a very nice approach to our work: taking it seriously but with a sense of self-aware fun.

When the organizers took the "Sunbelt" out of the London conference, I grieved about their lack of humour (if any place needs sun, it's London), but I let it pass as an OTO aberration. But to make a habit of a Sunbelt-less conference. No way! I might even start a counter-conference, and you could be sure Sunbelt would be in the title.

APPLIED SOCIAL SCIENCE

1. Didya know that **Subcommandante Marcos**, the leader of the Zapatista rebellion, has been identified (by the Mexican president) as **Rafael Sebastian Gullien**, a Mexico City sociologist born in Tampico? [*Miami Herald*, 5 Nov 95].

2. The following news story was written some months before Ted Kaczynski was charged with being the Unabomber. I still find it interesting:

"The publication of the manifesto in the Unabom case has led police to move away from the notion that the bomber studied math or computer science, saying his writing resembles someone... with intellectual roots in the less-exact world of the social sciences, like sociology or anthropology. Some experts said the manuscript contained little original thinking. They evaluate the writings of the self-described anarchist against what he says is a corrupt & dehumanized technology society as a passable if dated graduate-level discourse by someone versed in scholarly forms of argument.... He uses social science terminology with a sure hand,' said David Linberg,

prof. at U Wisconsin who is president of the History of Science society.

"But others argue that the bomber's scholarly credentials are uncertain, that his ideas could have been picked up hanging around coffee houses & libraries at any 1 of dozens of universities. Still others find it improbable that a serious scholar would address the dislocating influences of industrial society without referring to the works of giants in the field like Herbert Marcuse, Emile Durkheim or Max Weber. [BW: Braverman?]....

"If there is any agreement it is that the ideas in the ms. reach back to the late 1960s & early 1970s when the interplay between technology, politics & social behavior was a fashionable campus topic. But the country's colleges have move on to other issues as reflected, several professors said, in the tepid reaction to the Unabom suspect's manifesto on the campuses....

"[To find the Unabomber], FBI agents have applied computer techniques developed for market research on a precedent-breaking scale to cross-check vast lists of people living in Northern California, where they believe the bomber lives, with lists of people who live in other areas where the bomber supposedly once resided, like the Chicago area." [BW: What caught Ted is that his brother figured it out and reported him.]

[David Johnston, "Serial Bomber is Called More of a Criminal than a Terrorist with a Political Mission," NY Times 6 Nov 95]

3. There is NO TRUTH to the rumour that disgruntled network analysts set the recent bomb in the London Docklands very near the Fawltly Towers Hotel where we unSunbelt conferenced last summer. And I'm sure it's not totally their fault that when I wrote to the hotel's management to complain about shoddy service, their apologetic reply letter never reached me. <end *Private Eye* mode>

ANNALS OF SCIENCE

Granovetter and Bohr: Here's Jeremy Bernstein explaining Niels Bohr's original (1913) quantum theory: "The electrons in the orbits farthest away from the nucleus -- the so-called valence electrons -- are the ones that are responsible for chemical bonding. For example, the valence electrons can be shared by the various component parts of the molecule, something that is called covalent bonding.... The inner electrons do not participate in chemical bonding." [New York Review of Books, 16 Nov 95, p. 49]. The integrative strength of cross-cutting weak ties, eh?

Networks are not Born, They're Selected: According to Gerald Edelman's Theory of Neuronal Group Selection "we should not think of brain development, especially in matters such as perceptual categorization and memory, as a matter of the brain learning from the environment. Rather the brain is genetically equipped from birth with an overabundance of neuronal groups and the brain develops a mechanism which is like Darwinian natural selection: some neuronal groups die out, others survive and are strengthened. In some parts of the brain, as many as 70% of the neurons die before the brain reaches maturity. The unit which gets selected is not the individual neuron, but neuronal groups of hundreds to millions of cells. The basic point is that the brain is not an *instructional* mechanism, but a *selectional* mechanism; that is the brain does not develop by alterations in a fixed set of neurons, but by selection processes that eliminate some neuronal groups and strengthen others." [John Searle's summary in *New York Review of Books*, 16 Nov 95, p. 54. Edelman's own book is *The Remembered Past: A Biological Theory of Consciousness*; NY: Basic Books.]

A Chip Off the Old Block: Greg Heil, the original blockmodelling programmer, has re-surfaced, working with Rtime [[http://](http://www.rtimeinc.com/)

www.rtimeinc.com/], a spinoff of BBN developing realtime interactivity with active objects ranging up to the millions. "Essentially the solution we need to supply is propinquity. The internet is a gigantic crossbar, and efficient timely transmissions of updates requires channeling of communication. "Simnet" uses propinquity based on the 3D spatial organization of war games. Strikes me we could offer a number of "topologies," let people "chat" using different modalities (audio, video, paint, text, VRML, etc.) from a virtual location. One could easily wander and each modality could possibly be hooked to differing topologies." Greg's email: gheil@scn.org; website: www.scn.org/tl/anvil

SHORT SHTICKS

Annals of Humanities: I'll bet most of you didn't know that the following structuralists are on the Editorial Board of *Poetics: Journal of Empirical Research on Literature, the Media and the Arts*: **Diana Crane, Teun van Dijk, Wendy Griswold, Harrison White. Paul DiMaggio** (Soc, Princeton) is the Associate Editor.

Temporarily Disconnected: Networkers know that the sociology & gerontology folks at the Free U of Amsterdam are a hotbed of network analysis. Some key players: Marjolein Broese van Groenou, Fleur Thomese, Kees Knipscheer, Karen Klein Ikkink. They're all moving on Jan 1, 1996 from their charming Prins Hendrikslaan digs in central A'dam to the university's suburban campus. Unfortunately, they may be out of e-mail contact until April, 1996.

Tilly Gets What He Deserves: Charles Tilly (Soc, New Schl but soon Soc, Columbia) has won the 1995 European Amalfi Prize for his book, *European Revolutions, 1492-1992* (Oxford: Blackwell). The citation says, Tilly "analyses the revolutions of the last 5 centuries, including that of 1989, to understand both the formation of European states and the characteristics of revolutionary phenomena. The

theoretical framework is characterized by outstanding clarity, accessibility and elegance."

The Small World of Network Analysts: Those of you on SocNet were asked to participate, 3/96, in Aaron Dantowitz's and my attempt to redo Stan Milgram's "small world" study on the Internet. We picked as a target, my cousin Lloyd Levine, a public affairs M.A. student at Cal-State, Sacramento. I regret to report that only one chain, started by Bill Richards (Communic, Simon Fraser U) reached Lloyd, despite the fact that both starting points and target were university affiliated. We may try again, in a slightly different way. Scan your e-mails. As Abhay Bhatnager said, "Soon anyone who's not on the Web will qualify for a government subsidy for the home-pageless." (e-mailed to me by a friend, 13 March 96).

Help an Indian Colleague: A doctoral student in India studying (in Kerala): "Wives Left Behind, Wives of Migrants with Special Interest on their Support Networks." She would very much appreciate being sent copies of articles related to wives' networks in the temporary absence of their husbands. [As Indian libraries are generally thinly stocked, it would be much more useful if you sent her the articles themselves, rather than just a reference, and she probably would find collateral articles useful too.] The address is Mrs. T.T. Sara Neena, Research Scholar, Dept of Sociology, Bharathair University, Coimbatore 641046, India. This is a department which has had a lively group for a number of years interested in social network analysis.

Help a New York Colleague: Charles Kadushin writes that he & Wayne Baker are starting a new study of a large organization, but "he's concerned about the countless unreplicated minor variations in network questions used in organization research. So Charles would appreciate it if folks would

send him items used in their studies. "Better to use someone else's widely used "dumb question" than your own new "brilliant" questions which have no norms and which you are not sure will work anyway." We will circulate our final list and probably publish a note in *Connections*." Charles' address is: PhD Program in Sociology, Graduate Center, City U of NY, 33 W 42 St, New York NY 10036-8099. E-mail: ckadushi@email.gc.cuny.edu

Tape Unwound: Staring at me are three tapes from my first East York and (even older) Pittsburgh projects. The U Toronto tape library is no more, and I could either retrieve them or have them dumped. It seems like only yesterday (1965 actually) when I used "Sam Stouffer's own counter-sorter" in the basement of Harvard Soc Rel's Emerson Hall. I wound up using my IBM keypunch cards for pre-post-it notes to students. Now a tape created on "Phil Stone's own tape drive" has had its last spin. Oh well, I still have a bank of 5.25" floppy disks.

"Travel to Trust!" I've been meditating a lot recently about what face-to-face contact buys you over e-mail contact. Why travel to Charleston when we can cyberchat? My usual response is cumbersome, saying that the greater bandwidth of face-to-face contact provides a better basis for relationships, altho they could be well-sustained in the interim by email. Now Charles Grantham, a CSCW consultant, has shared with me a succinct formulation: "Travel to trust."

Sucking Up to the Graduate School Experience: *The Addiction* is a recent movie by Abel Ferrara that tells the story of Kathleen Conklin (Lili Taylor), a philo. doctoral student who becomes a vampire, "alternately terrifying, sharply intelligent & highly sensual". "In a scene which shows Ferrara at his most outrageously excessive, Kathleen receives her doctorate & invites everyone who's helped her get that far back to her apartment for a little celebration. The bloodbath which ensues is a

truly horrifying scene -- both darkly funny (especially for anyone who's been in graduate school & knows that particular feeling you have for everyone around you) & disgusting at the same time." Laura Roebuck's review, *Festival Magazine* (Toronto), 1/ 96: 2.

Post-Doc: Want to collaborate with Bibb Latané on "Dynamic Social Impact: The Creation of Culture by Communication"? It's an attempt to link individual-level theories of social influence to group and societal phenomena. Bibb is at Psych, Florida Atlantic U, Boca Raton FL 33431; email address is latane@socpsy.sci.fau.edu

An INSNA Opportunity? "Studmuffins of Science" is a new calendar, featuring 12 male scientists in hunky poses. ("Dr. March" is ecologist Rob Kremer, looking quite Fabioesque in *Scientific American*, 1/ 96:21.) Having kept my eyes open around the Sunbelt, I know that INSNA can do better. Who could resist Lin caressing his windsurfer, Alaina with her surfboard, or Stanley stroking his mustache? And as networkers, we'd never stand alone but form Simmelian groupings. It could be the beginning of a new wave of visual positional analysis.

An ISNA Opportunity: If you accidentally leave the first "N" out of INSNA, you're a member of ISNA, the Intersex Society of North America (aka hermaphrodites). You can learn more about ISNA on the Web: <http://www.isna.org> [Source: *Toronto Globe & Mail*, 17 Feb 96].

A "Minor" University Opportunity: It's more than platitudes to note that a lot of so-called minor (or nth-tier) universities are awfully good in some or many things, and so are some/ many of the faculty/ students who are there. Indeed, to label a place a "major" or "minor" university is to make a probability statement about quality, and one with substantial lag between perception and reality. (See recent sociology rankings for exem-

plification.) It was intriguing to note that most of the participants in the 4/ 96 SIGCPR/ SIGMIS conf. were info. scientists from minor universities. All of which got me to thinking: Most of the papers at this conference were about computer supported cooperative work and telework, research areas that hardly existed a decade ago. It is probable that newly-emerging fields provide especially good career opportunities for smart people/ ambitious departments at minor universities. The so-called major universities are so heavily invested in existing fields that they can't give hot new fields their due. On the other hand, there's nothing so lame as a department devoted to last decade's passing fad. Wonder what postmodernists will be doing a decade from now?

Awareness as the Product of Competing Neural Networks: "At any instant there is no dividing line between sensory data that people are conscious of and those that are unconscious. In fact, we are not conscious of anything at precisely the time we imagine. What we experience, Dennett maintains, is generated a little after the fact, as the result of a competition among multiple patterns of mental activity propagating within the brain. Awareness comprises the small fraction of those mental events whose influence will persist and so alter beliefs about what just happened." Tim Beardsley's profile of David Dennett (Philo, Tufts), *Scientific American*, 2/ 96: 34-35.

Speaking of neural networks, SPSS now has "Neural Connection," a neural network add-on for about \$500 (according to *PC Magazine*, 26 March 96, p. 51).

JOURNAL STUFF

Networker (and my coauthor) **Charles (Chuck) Wetherell** (Hist, U California-Riverside) has taken over as ed. of *Historical Methods*. "I'm always looking out for good

historically minded social network analytic stuff." Contact him at: merlin@ucr.ac1.ucr.edu

Kathleen Carley (Social & Decision Sci, Carnegie Mellon U) is the founding co-editor (with William Wallace, Rensselaer Inst of Tech) of **Computational and Mathematical Organization Theory** which aims to "extend the traditional mat. approach to formal organizational theory by including computer simulation, logic" and A.I. An interdisciplinary & international quarterly, it'll also have didactic tutorial papers. Email address is carley@andrew.cmu.edu. Subs, US\$100/ yr: Kluwer, 101 Philip Drive, Norwell MA 02061-1677.

CONFERENCE STUFF

The *Social Science History Assoc* met in New Orleans, 10-13 Oct 96. (Guess they couldn't get Mardi Gras, unlike Scot & Jill.) Peter Bearman (Soc, U No Carolina) organized a Networks session [bearman@gibbs.oit.unc.edu]. Tel: 919-962-7200; Fax: 919-962-7568.

(Reading that area code reminds me of telephone company lore. When area codes were first set up, they all had "1" or "0" as the middle digit, while the first and last digit were rank-ordered from most populous metro area -- New York City [212] -- to the then-smallest -- the Chapel Hill area [919]. The reason, as those over a certain age will recall, was to minimize the number of clicks the telephone DIAL would have to make in calling the number. Big cities, with more calls to them, would tie up the lines least with low-click numbers.)

Preliminary word has it that the *Sunbelt* (hallowed be thy name) Social Network Conf. will meet, in 2000, in Vancouver. Info: Bill Richards, Communic Dept, Simon Fraser U, Burnaby BC, Canada.

Wales' Centre for Social Policy R&D is having its annual conference, 13 June 96,

"Families & the State: Caring over the Life Course," with sessions on family support, coping. Info: Barbro Das Gupta, CSPRD, Bryn Afon, U of Wales, Bangor LL57 2DG. tel: 02148-382230.

The *Nags Head Conf.* has a track on "Groups, Networks & Organizations, & is held late Spring at the Highland Beach Holiday Inn in FL. Contact Bibb Latané or Deborah Richardson for details, Nags Head Conf. Ctr, 4521 S Ocean Blvd, #6, Highland Beach FL 33487; tel: 407-278-4151. Costs \$295 for 5 nights & all meals.

THE RULES OF THE GAME IN LIMA

This is a memoir of two weeks along the Inca Trail in Chile and Peru, March 17-30, 1996

1. Travelling around Lima is a network game. Essentially it's a form of market signalling, except that instead of profit the reward here is successfully advancing your vehicle across the intersection. As the roads are extremely crowded, this is a game that must be played continuously. To make matters even more interesting, this is a game played on a field of potholes.

At an intersection, no driver knows each other, but no driver can safely advance unless all others cooperate. Yet each driver wants to get across first. Under these circumstances, success results from a mixture of competition and cooperation.

There are many vehicles and intersections in Lima, a city of 8 million, but only few traffic lights. Each intersection is a contested zone. (For Harvard types, it's like a more intensive and extensive version of Central Square, Cambridge.)

So how do vehicles get across? Certain rules operate: Cars on bigger roads have

priority over those on smaller; bigger vehicles dominate smaller (buses and trucks do very well); older cars over newer (duct tape holding fenders together is a special advantage). S/he who honks first also gets many game-personship points. As in Boston, eye contact is covert. To look at others is to acknowledge your awareness of them, and hence their potential right to pass through the intersection ahead of you.

These are multiple, contradictory rules and not everybody knows them. (Like Toronto, Lima is a city of in-migrants, except that most are from the Andean highlands and mountains where the llama traffic is more sedate.) Nevertheless, at each intersection, about once per minute, each driver must calculate his/her odds on all of these rules, and -- just as importantly -- do the calculations for all other drivers. It's a speeded-up Meadian scene: taking the role of the others is necessary to predict how each of the others will behave at their common intersection. (For once, Harrison White oversimplified: After Lima, I'm convinced that the proper subject of his book should have been *Multiple Identity and Control*.)

Despite all this surface noise and all this apparent danger, the system works. In four days and forty exciting taxi rides, I and my network compadres (Bev Wellman, Vicente Espinoza, Katie Faust, Larissa Adler Lomnitz) saw only one minor fender-bending accident.

The intersection game is made especially exciting by the complementary taxi/ bus game in Peru. There's been an extreme marketization of the Lima transport industry. (Read Herman DeSoto's *The Other Path* for a contrast with the old days of heavily bureaucratic regulated and inefficient bus transport.) Want to drive a taxi in Lima? Spend five soles (US\$2.00) for a large pink plastic suction sign that says "Taxi" (surely one of the most international of all words). When your boss doesn't need the car, put five liters of gas in (everyone runs on near-empty), stick the sign on your windshield, and

you're instantly in the taxi business. All perfectly legal: no special license or exam is required for you or your car. All fares are negotiable, and most drivers expect extra from presumably well-heeled foreign passengers. Cars vary from Brazilian-made VW bugs -- the mode -- to moonlighting limos: our biggest coup was to get a "taxi ride" to the airport in an Assistant Deputy Minister's Peugeot 605 spotless semi-limo: his chauffeur was making a few extra bucks as a free-lance taxi driver between official duties.

There's room for upward mobility. A few thousand dollars buys you a used car, so you can be a full-time (taxi) driver, \$8,000 gets you a used mini-bus or "colectivo". Decide which route you want to travel, scribble it on a sign, figure out what you want to charge, and hire a loud-voiced friend to shout your itinerary out the door when you stop in traffic. Voilà, you're a bus company! If you prosper, there is nothing to stop you from buying bigger buses as long as the market will bear it.

The result is a marvellously available and flexible public transportation system. The number of buses and taxis and their routes are totally market-driven. If there isn't enough business on one route, the bus operator just scribbles a new sign and follows the crowd. We went into the farthest barrios of new Andean migrants, where the homes were made only of straw mats on poles, and we saw many buses and taxis bringing workers, shoppers, etc. to downtown Lima for about 30 cents per day.

It's not surprising that we noticed that Lima seemed to have the highest percentage we've ever seen of small shops devoted to vehicle repairs. Reportedly, there's even a market where one can go to repurchase parts that have been stolen from your vehicle. (This reminds me of Jackie Mason's politically incorrect joke that he goes to Puerto Rico every year -- to visit his hubcaps.)

In both Peru and Chile the US dollar is a widely-used alternative currency because there are no foreign exchange controls. Big-ticket items such as houses and cars are routinely quoted in dollars (although local inflation is low now). In both countries, the US Treasury was running TV ads telling Chileans and Peruvians not to worry about the new-look \$100 bill: the old one would still be legal tender. The foreign use of dollars is probably a major export item for the US.

My one fearful fantasy never materialized. I reasoned that with no controls on who could drive a taxi, this would be a fertile field for free-lance kidnapers. Look for a rich foreigner, pick him/her up, and drive to where your confederates were lurking. Fortunately, this game never was played, but it did help me to appreciate some benefits of regulation.

2. Why were we doing such a detailed study of Lima traffic? Katie, Vicente, Larissa, Bev and I were attending "red-lat" (its informal name), the founding conference of Latin American social network analysts. ("Red" is "network" in Spanish, or "castillano" as folks say in Peru and Chile.) The conference was organized by anthropologist Jeanine Anderson (who's come to several Sunbelt network conferences) and sociologist Aldo Panfichi, both of the Social Sciences Dept, Pontifical Catholic University of Peru. (Reportedly the Pope takes his leadership responsibilities seriously, being involved in the discussions about who should head the university.)

There was a crowd of about 170 scholars at the conference (in fact registration had to be capped at that number), mostly Peruvians curious about social network analysis, but including sociologist Vicente Espinoza from Chile (trained in Toronto, I proudly add), Larissa Lomnitz from Mexico, an extremely bright, self-trained young Colombian (Juan Pablo Zuluaga), and a Uruguayan interested in decentralization (Ana Laura Rivoir). *CON-*

NECTIONS co-editor Katie Faust (US) ran an all-day introductory methodological workshop that 50 people flocked to attend, despite the extra cost. I gave the keynote address (I thought of it as my papal blessing) about the privatization of community and talked about personal networks, Bev Wellman (Canada) spoke about how different kinds of networks channel people to medical or alternative health care, Vicente linked barrio relationships, social mobilization and collective identity, while Larissa compared Chilean horizontal and Mexican vertical political networks. (Larissa is a citizen of Chile who has lived/ worked in Mexico for many years). The conference also had a special session honoring Larissa for her path-breaking studies of networks of marginals, middle-class and politicians: Every Latin American social science undergraduate has read her book about the myth of marginality in Mexico City slums.

Interesting Peruvian papers included Jeanine Anderson on barrio community development, Aldo Panfichi using network data to question stereotypes that contrast supposed untrustworthy, apolitical, coastal "crillios" with supposedly trustworthy, solidary, politicized Andeans (primarily Indian), Oscar Jimenez tracing the transmission of AIDS through male youth gangs and their respectable and not-so-respectable girl friends. Although many of the other papers were at the early metaphorical stage of social network analysis, there was the promise that the interesting questions raised would soon mesh with more detailed ways of gathering evidence and more systematic ways of analyzing it. Most attendees were from Peruvian universities and NGOs, interested in discovering what this thing called "social network analysis" was about. I was reminded of how much European network analysis has developed in the decade since I gave the keynote address to an early French conference organized by Alexis Ferrand and LASMAS associates. But I also hoped we were not just the latest American fad.

I came back with organizational thoughts for future conferences. It's great to have large introductory sessions, as the Peruvians did, to acquaint neophytes with network thinking. It's also necessary to have something to get people started on analyzing networks, such as Katie Faust's day-long methodological workshop. But there was also a strong need for another kind of session: seminars limited to professionals who would critique each other's substantive work and suggest research improvements based on network analytic lore. There were about 10 colleagues at the Lima conference who were ripe for this kind of discussion.

All sessions started 30 minutes to an hour late. Most people, familiar with local practices, didn't even bother to show up until then. We were told this was the Peruvian way (and also the Chilean way, as my lecture started 30 minutes late there too). We never figured out how the university's class schedule worked. What do people do when they have two classes back to back?

3. "Have Gun, Will Stand" is surely the anti-Paladin motto of another major Lima industry: private security -- the obvious site for Bonnie Erickson's next project. On every middle-class block, there are at least three uniformed rent-a-cops wearing pistols, flak jackets and baseball caps (embroidered with the name of the security company they work for). Poor men often have two basic choices when they leave the army: crime or rentacop. I was glad so many chose the latter career path even though this ultimately meant that we consumers were paying them not to become criminals. One reason for avoiding the wrong side of the law may be that the General in charge of the National Prison Institute reports that 75% of the nation's 22,210 prisoners have not completed their trial, with some being held in prison for four or five years without sentencing (Reuters news service, as reported in the *Toronto Globe and Mail*, April 25, 1996). Indeed except for one urchin proto-pickpocket

(foiled of course by Tilley pants), we were never hassled by criminals. Even the local supermarket, Blockbuster video and sub shop had one to five rentacops outside their doors -- although a sub shop in Lima is a trendy, upper-class thing. We knew we were staying in a very classy hotel because the security guys in it wore blazers and hid their guns in concealed shoulder holsters.

In the 1980s there were real terrorist and criminal attack problems. Armed security proliferated outside commercial establishments and in middle-class neighborhoods; and houses and institutions have got walls, gates and window grills. Security has stayed at a high level, even though the threat has diminished. We met one elderly midwest-American couple in Peru for their son's wedding to a Peruvian school teacher. Because he managed an important mine, he arranged for his parents to be met at the plane by a convoy of three armor-plated cars (remember *Patriot Games?*), and for his parents to be accompanied by a bodyguard even while sight-seeing at the Inca ruins of Machu Picchu.

We'd read about crime threats before we arrived and were apprehensive. Yet we never saw an incident, despite our sociological investigation of some of the more interesting neighborhoods. I suspect that the guards are less needed now, but they help people to feel secure and they soak up unemployment. Having a guard is probably a status symbol for a store or residential block -- no sub shop or neighborhood should be without one or else people won't shop or live there -- just like poor barrios only feel that they've arrived when they get their own community development worker. (When I was a kid in New York City, the only certifiably successful teenage gangs were those with their own "j.d. workers".)

4. Bev and my Lima experience was the culmination of our two and one-half week trip to Chile and Peru. We spent four days in Chile with Vicente Espinoza, including a lecture at

his SUR (Santiago) research institution: my privatization of community lecture again. Unlike Third World, widely-inegalitarian Lima, Santiago Chile is modern, stylish and with few visible signs of poverty. Its handsome ambience reminded me of a southern European city. Even so, we encountered machismo in an unexpected place. Coffee shops, like the Cafe Haiti, are for men only, who stand at long bars downing quick cups. Starbucks is better. Bev was the only woman customer we saw in such a place, although she wasn't hassled. The coffee servers are all pretty, buxom young women clad in clinging lycra and short skirts, smiling broadly all the time. The situation was as if the Playboy Club had bought Starbucks.

5. We visited the barrios where Vicente had done his thesis research. (There's an English-language paper forthcoming in my *Networks in the Global Village* book and a Spanish revision and translation of his Toronto thesis coming out as a Chilean book this year.) In a decade, mud/ straw shacks that had sprung up in an "alegal" (to use Detelina Radoeva's nice term) occupation had been transformed into well-painted cement block, glass-windowed houses with electricity, TV and proper roofs. Many had wood siding and trim, and the telephone company was by putting in lines. Blockbuster had opened a video store a few kilometers away.

6. Rural in-migration is currently much greater in Lima than in Santiago, and we were able to trace its development as Jeanine Anderson drove us from central Lima through the informal occupation area of Villa Salvador, housing many thousands of people. The barrios of Villa Salvador closer to central Lima are heavily developed, with multi-storied, well-built homes, factories and stores, along with all modern services. Further out, the paving ends, and the structures are mud-brick. (Nevertheless, much store-sold Peruvian furniture is made in mud-brick workshops.) At the outskirts, new "homes" are springing up in the

desert. They're made of straw mats and often don't have electricity or water. The occasional home is also a variety store, and some entrepreneurs are selling cement blocks and corrugated roofs to would-be renovators. (Ace Hardware has also opened several Lima stores.) Everywhere, the taxis, colectivos and buses cruise to take residents to other parts of Lima.

We saw one of their destinations when Jose ("Pepe") Tavares, a U Mass. trained political economist took us to Gamarra, the very dense heart of Lima's textile industry. (It's where some of your t-shirts, etc. come from.) The place was filled with small businesses, selling everything from buttons and thread to high style. It reminded me of the New York City garment center where my parents' and their relatives had sought their fortunes (but made only a living). We visited one shop selling low-end jogging clothes (you'll probably see them at Wal-Mart for \$5-\$10, and another rooftop place which was silk-screening the fronts of shirts. At the time, they were doing two jobs: printing highly-styled crosses on blue cassocks and Shell Oil logos on gas jockeys' shirts. All but the senior workers were women; one had her young son along. The working conditions compared favorably with the southern Chinese factory we visited a few years ago (where the rest of your t-shirts come from). Like China and Taiwan, I saw one restaurant selling snakes, live and ready-to-kill, cook and eat.

7. Truly the high point of our trip was flying UP to Cusco and Machu Picchu from Lima: 11,000 feet (3,400 meters) up, in fact. Cusco was the Inca capital and the subsequent heart of the Spanish empire -- transforming the political economy of America and Europe as a result of its Inca gold hoards and silver mines. Most Spanish churches were built on the foundations of Inca temples -- a simultaneous act of desecration and appropriation. (Our curiously-named "Hotel Liberador" had once been Pizarro's headquarters house.) With

11,000 feet comes altitude sickness: headache, nausea, malaise and loss of appetite. To compensate for the thin air (less oxygen per cubic inch), blood vessels in the brain expand (causing a headache) to divert blood to the brain from other, less critical parts of the body. The rest of the body partially shuts down, causing malaise and loss of appetite. We quickly gave up our plans to open a western restaurant, the Deli Llama, especially when we learnt that "llama" is pronounced "yama". (The Lima branch would be called the Deli Lima, of course.)

Fortunately, Machu Picchu, the well-preserved ruins of an Inca religious/military/ farming community, is "only" at 7,000 feet, so our bodies were able to relax. Machu Picchu was great, especially when the day-trippers left at 2 PM. The only people left at the site were the thirty guests at the Hotel Ruinas. We wandered among the beautifully-designed buildings, with their precisely-cut stones fitting tightly in mortar-less walls, and their trapezoidal doorways giving good seismic protection against earthquakes. Five pleasant llamas are in full-time residence, doing lawn-mowing. (These were the only llamas we ever saw; they're being replaced by cattle and sheep at these lower altitudes although they supposedly are still the large animal of choice above 12,000 feet/ 4,000 meters.)

We walked along the Inca Trail, built out of rock steps and mountain staircases. We climbed 1,500 feet halfway up nearby Huayna Picchu mountain before we were forced back by altitude sickness and a cliffside Inca staircase that was slippery when wet. We followed in Indiana Jones' footsteps (remember the opening of *Raiders of the Lost Ark*?) to see the sun rise and flash thorough a window that on June 21 is precisely aligned with a sacred altar. (Query of the day: Did Indiana Jones use Lomotil or Imodium?) Several tourists brought crystals which they put on the altar "to catch the energy". Perhaps

that's why there was so much turbulence on the flight back to Lima.

8. So went the high points of our trip. It's interesting how with even the short passing of time, we're forgetting the annoyance of over-night flights, 3 AM wakeups to take the only flights/ trains available, and lost luggage. (AeroPeru didn't handle our lost luggage well, they kept changing their schedule, and we weren't pleased about the peeling duct tape holding together parts of the plane's interior. With privatization, they're now owned by AeroMexico. Privatization also means that as many as five phone companies compete in Chile, even for local calls. To push their campaign, Bell South brought former General Norman Schwarzkopf to Chile to lecture about applying the management of the Gulf War to business leadership.)

Somewhere in transit I developed my new quick coding scheme for identifying nations who are in the periphery, semi-periphery or core of the world-system. The impoverished periphery has neither toilet seats nor toilet paper, the semi-periphery has seats but no paper, and the well-equipped imperialistic core is fully equipped. Although this coding scheme uses categorical indicators for network phenomena, it is easy to use and always on the traveller's mind. Moreover, it reflects the high level of underinvestment in the periphery and the fact that the semi-periphery seems to have more funds available for capital investment (seats) than for maintaining what has been built (paper). Fortunately, we only ventured as far as the semi-periphery, and as intrepid explorers, we carried our own supplies everywhere.

East Asia, of course, is the major exception to this coding scheme, with cultural and sanitary reasons causing affluent countries to have underdeveloped seating. Reportedly Bill Clinton will soon lead a trade mission to open up Japan to the aptly-named "American Standard."

On a grander scale, Lima has the most visible manifestation of the semi-periphery's unfortunate bias for capital investment rather than maintenance. It's an elevated metro-rail system way out in the suburbs that mostly consists of isolated half-built stations and pillars to hold up tracks that never were built and probably never will be.

Charles Tilly is an Honourary Doctor

Chuck Tilly received his Hon Doc from the U Toronto, November 23, 1995. He was cited for his work in developing methods for systematically studying the relationship of social change to networks of collective political action, and for showing how such actions are structurally produced. I wrote/read the university's citation (reproduced below), while Bonnie Erickson led the procession. Fittingly, Bonnie was The Beadle, carrying a large silver mace to keep order, although she felt that a black belt would have been more appropriate.

The Citation

Madam Chancellor, Charles Tilly is currently the Director of the Center for Studies of Social Change and the University Distinguished Professor at the New School for Social Research. His work focuses on the relationship of large-scale social change to collective action. Of course, we must note his score of books, hundreds of articles, and thousands of lectures. But it is not the prodigious output that we celebrate. It is his extraordinary impact on the ways in which we investigate politics and social change -- a contribution that can help us understand the social policies of our time.

Toronto has been an important base for Charles Tilly's work. To be sure, he received his doctorate from Harvard in 1958, and he served a few warm-up years on the Princeton

and Harvard faculties. But it was the Sociology Department at the University of Toronto that first recognized his genius, jumping him in 1965 from an instructorship at Harvard to a full professorship here. This bold step helped build the fledgling department to its international reputation. Tilly quickly became its heart, establishing sociology as a systematic, empirical science and mentoring its doctoral program. In addition to developing social history, he began the study of urban social networks -- an area in which Toronto became world famous. He also set a standard for physical fitness. During the hiring visit, the chairman asked Tilly what he wanted to see. He replied, "Take me to your swimming pool!" Even the physical became political: he and his wife Louise soon became demonstrators at Hart House, urging it to accept women.

Unlike some scholars who keep their nose to the computer screen, Charles Tilly has had a profound "multiplier effect." He has been an extraordinary giver, helping colleagues to formulate questions, locate information, and use scientifically appropriate means to discover answers. All of his students and colleagues -- Tilly doesn't make status distinctions -- tell of wandering into his office with vague ideas and leaving an hour later with a coherent intellectual agenda, in precisely numbered points, and a research design to turn the ideal into the achievable.

Although Charles Tilly moved to the University of Michigan in 1969 for an appointment in *both* history and sociology, he left a strong legacy here of social scientists committed to his systematic, social structural approach. Tilly's stay in Toronto laid the groundwork for his career. By contrast to Americans who focus on how people feel -- their attitudes -- Canadians naturally see problems structurally, as relationships of cooperation and contention. Tilly applied such a Canadian analysis to the study of social movements. Before his work, people tended to think that riots, rebellions and strikes were

products of disgruntled mobs running amok. Analysts feared that mobs resulted when people had lost their bearings from too much modernization and their attitudes had gotten out of hand. This is a comfortable sort of analysis for established politicians because it says that protesters have gone a bit crazy -- be it the Rodney King riots in L.A., the Winnipeg General Strike, the overthrow of the Iranian Shah, or the forthcoming events in Toronto.

Exciting and comforting as this mob-gone-amok approach is, Charles Tilly has shown that it isn't true. In comprehensive and systematic analyses, he demonstrated that it is the normal workings of politics that fuels violent as well as non-violent contentions for power. It's not people's crazed attitudes but their relationships that involve them in political activity, some of which escalates into violence. In fact, rioters are usually more settled and have stabler social networks than those who do not riot.

This is powerful and unsettling stuff because to take it seriously means to stop dismissing rioters as mindless mobs and to start seeing them as concerned interest groups contending for power and resources. Policy-makers are reluctant to see this because Tilly's approach is truly subversive, treating government forces as just another set of contenders. To use the language of post-modernism, it de-privileges them. Indeed, Tilly has shown that governments usually maim and kill more people than rioters do.

At an age when most scholars have become pontificating pundits pretentiously propounding puerile pomposities, Charles Tilly keeps doing research. His *The Contentious French* recently won the best book of the year prize from both the American Sociological Association and the Society for the Study of Social Problems. This year's hot book is *Popular Contention in Great Britain*, the cumulation of more than a decade's work. My favourite is the wonderfully titled *Big Structures, Large Pro-*

cesses, Huge Comparisons, a font of wisdom for taking social science seriously.

The way in which Charles Tilly goes about his work is as important as his substantive findings. One may wonder what a social historian is doing as head of the U.S. National Science Foundation's Mathematical Social Sciences Board? It is because Tilly has shown all of us how to do the systematic study of the past, linking statistical with qualitative information. Rather than the traditional historian zeroing in on a few texts, Tilly treats history as if it were survey data. Do you want to really know about political contentions? Then you do what Tilly has done: systematically sample, record and analyze newspaper accounts and police files as if they were responses to a survey. This approach leads you away from the pitfalls of relying on the memoirs of a few observers. Only then will you get a comprehensive, surefooted account of how the troubles began, who was allied with whom, what their interests were, who hurt whom, and what the outcomes were. In this way, Charles Tilly has interviewed the past.

Gathering and processing such information takes industry. For thirty years, Tilly and his associates fanned out across Europe, searching obscure newspaper and police records. They were everywhere. Late one June afternoon, my wife and I pulled into an isolated town in the Vendée, seeking only a rest stop. The small city hall was open. When we walked in for a look around, a thin little man in a dusty white smock hurried to intercept us. "*Bonjour, nous sommes des sociologues canadiens,*" I said in my finest Toronto French. He was puzzled for a moment. Then his face lit up and he exclaimed: "*Encore des étudiants du Professeur Tilly!*"

He was right, of course, for all social scientists have been students of Professor Tilly.