Summer 1994

RAIN

ECO-NET

Let us know how access to this document benefits you.
Follow this and additional works at: http://pdxscholar.library.pdx.edu/rain_japt

Recommended Citation
http://pdxscholar.library.pdx.edu/rain_japt/102

This Book is brought to you for free and open access. It has been accepted for inclusion in RAIN: Journal of Appropriate Technologies by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.
Car Co-ops
Grassroots Bolivia
Berlin's Eco-Villages
Christopher Alexander's Latest

Volume XIV, No.4  $5.00
In this issue...

There are many ways to revive communities while providing opportunities for meaningful work. The most fruitful involve creating permanent alternative institutions that catalyze fundamental change at the level of the neighborhood. In Berlin, the rag-tag Fabrik collective (page 8), turned an abandoned movie lot into a full-scale experimental urban village. They live the dreams of many of us, injecting the liveliness of local, cooperative effort into politics, economics, art, engineering and education. And they help thousands of others to achieve the same.

There's a different kind of neighborhood revival at Berlin's Block 6 (page 24). This one was achieved by awakening a taste for innovation among local government officials. This ambitious project aims to bring a sizable city block as close as possible to self-sufficiency in water treatment. Beyond that, the project has taken the form of an expansive and delightful park, demonstrating that ecological living can immediately improve quality of life, and is not simply difficult, self-sacrificial rationing.

Similarly, social justice does not simply mean low-level basic needs for everyone. With a bit of thought, and a great deal of grassroots community involvement, the same resources that would provide, say, an ugly and meagre ghetto apartment development could instead provide excellent, diverse and deeply satisfying housing. That brings us to the message intended by Christopher Alexander’s latest housing project (page 14): poor people should not be swept into bad houses.

More generally, we should never believe that sterile, mass-produced goods are the salvation of the poor and disenfranchised. Communities are almost always able to provide for their own needs better, in a unique and humane manner, if only given the chance to do so. The Kechuaymara project (page 34), among indigenous peoples in Bolivia, makes that particularly clear.

---

Front Cover
A small courtyard within the recently built Agate Street Student Housing in Eugene, Oregon, designed by Christopher Alexander and the Center for Environmental Structure. This was the first time in decades that Alexander worked with the institution for which he long ago designed the Oregon Experiment in democratic planning. See page 14.

Back Cover
The collective bakery of the UFA Fabrik urban village in Berlin. The village occupies the site of the former UFA film studios, where famous avant-garde '20s films such as Metropolis and Blue Angel were filmed.

---

2 Cooperative Transport: Berlin's STATTAUTO (Instead of Cars)
Carsharing has progressed from a convenience for a few ecology-minded students to a mainstream transportation alternative for a giant city. Stattauto fills many of the gaps in Berlin’s public transit system, while effectively attracting people away from private car ownership.

7 The Eugene Car Co-op
Some intrepid activists have begun a Stattauto-inspired car co-op in the United States: no easy challenge where the automobile reigns supreme.

6 Carsharing Starter Kit
The Eugene Car Co-op is intended as a model organization. Its bylaws, articles of incorporation, forms, contracts, research and promotional materials are available through RAIN to make it much easier to start one in your neighborhood.

7 Carsharing Resources
Aside from the Car Co-op material based on the Eugene group’s experience, and an upcoming book from RAIN, the serious carsharing organizer can benefit from these contacts.

8 UFA Fabrik
A utopian microcosm in the middle of Berlin, deeply tied to its neighborhood. Discover UFA Fabrik, home to 100 people, a circus, performing groups, cafés, workshops, theaters, ecological and social projects, schools, community self-help programs, and a children’s farm.
Christopher Alexander Visits The Oregon Experiment

14 An update on the 25-year-old Oregon Experiment, as brought into focus by a recent extended visit from its inventor. Housing, democracy, cooperation, ecological sensitivity and the nature of architecture all figure prominently in this instructive tale.

Block 6

24 An Integrated Water Concept

Greening a small town, or a small house, is hard enough, but what can one do with ugly, modern apartment buildings in an urban environment? Block 6 is on the cutting edge of large-scale ecologically-sensitive re-development. Its strength lies in the water.

Oversea Development Network And Bike-Aid

30 An amazing group of young organizers put their lives on the line every summer, talking to average US citizens about community problems and solutions at home and abroad.

Oversea Development Network Publications

32 ODN publishes dozens of handbooks and catalogs for the student who wants to get involved in ecology and social justice work.

Kechuaymara

34 Grassroots Solidarity in Bolivia

Two indigenous tribes have joined resources to work directly on the basic needs of their villages. From providing clean water to starting banks that loan seed, Kechuaymara is demonstrating both the strength of mutual aid and the intelligence of democratic, locally-directed development.

Kechuaymara — Quinoa Recipes

37 One of Kechuaymara’s interesting projects, suggested by the villagers themselves, intends to create a renaissance in the use of grains native to the region. The project uses both farmer-to-farmer training techniques, seed-based banking, and instructions on growing and cooking the grain. This is an excerpt from one of their booklets.

The Bike Column

38 What are the best advocacy handbooks for the alternative transportation activist? How can a project raise money with Valet Bike Parking?

The Well-Trained Practical Idealist

43 Every High School, College or University needs a Community Studies program. The 25-year-old program at the University of California at Santa Cruz has a powerful impact on the city, helping idealistic young activists to train themselves in effective organizing of community projects. Read about just how meaningful education could be. And watch the mice bell the cat.

Resources: Book and Video Reviews

52 EarthScore; Practical Home Energy Savings; Consumer Guide to Home Energy Savings; Straw Bale Video; Public Therapy Buses; and Toward Sustainable Communities, by former RAIN editor Mark Roseland.

More Resources

54 Agriculture; appropriate technology; children and youth; cultural survival; environmental action; forests; communities; international grassroots organizations; mental health and urban renewal.

RAIN Back Issues List and Subscription Form

58 Writer’s Guidelines

61 Credits

61 Raindrops

Next Issue

Eco-Mongolia
England’s Rochdale Cooperatives
Grassroots Neighborhood Clinics:
The White Bird Clinic in Eugene, Oregon
The Westside Clinic in Santa Cruz, California
The People Power Bike Advocates
A Freetown in Copenhagen
And More ...
Cooperative Transport: Berlin’s STATTAUTO (Instead of Cars)

By Michael LaFond
Photos by David Brandt and Michael LaFond

It’s not easy owning a car. Maintenance, repairs, parking, traffic, break-ins and accidents can be real headaches. Cars devour hard-to-earn cash. And after paying for registration renewals, insurance and permits, it seems you must drive just to get your money’s worth. With a car, you make commitments to travel distances you wouldn’t otherwise consider. So you’re stuck in the thing, unable to get outdoors even though you’re apparently outside. Many people live with just their feet, a bike and the bus, but you don’t see how you could.

For people in search of alternatives, one of the easiest ways out of auto ownership is the car co-op. A carsharing movement, building up in Europe for several years, is now making its way to the New World. In a car co-op, you don’t suffer the stress of ownership. When you really need a vehicle, you can find a suitable one in the neighborhood co-op lot. The less you drive, the less you pay. And, you dramatically reduce the number of cars in your city.

In Berlin, carsharing is synonymous with Stattauto. It began as a small initiative in 1988 in the Kreuzberg neighborhood, where economics student Markus Petersen and a few friends came together to share the expense and guilt of car ownership with each other. They looked for assistance to create a public carsharing project, but the government wasn’t interested in their idea. They had to depend on their own vision and a few rusty old cars to get going. For two years Markus and his brother Carsten, an unemployed philosophy major, experimented with, and organized the project as a kind of test study.

Though Stattauto moved slowly in the beginning, after incorporating in 1990 it rapidly developed into a significant transportation alternative. Since December of 1990 it has picked up at least one new member each day. In 1992 the group grew from 500 members to 1000, and all together there are about 3,000 active carsharers in Deutschland. Car co-ops have spread to as many as 100 cities in a growing number of European countries.

Members of Stattauto, wishing to use a vehicle, simply get on the phone and dial the reservation number. Ninety
percent of the time, the callers get the car they want immediately. A variety of automobiles (as well as workbikes, which are free of charge) are distributed around 14 lots throughout Berlin, making for only a short trip to fetch them. Car keys and travel logs are found at the lots in safe-deposit boxes, to which members have magnetic card-keys. Upon returning the vehicles, the well-behaved members fill out travel reports for recordkeeping and accounting. Stattauto bills monthly, for kilometers travelled, hours of use, and the taxi rides that can also be billed to members' cards. The group has a "moonshine rate" for women. Between midnight and 8am, women drive free to their destination and return the car in the morning, avoiding a potentially dangerous walk in the dark.

Becoming a Stattauto member involves an investment of $600-900 (returned upon leaving the group), an initiation fee of $75, and monthly dues of $5 to $7.50. The costs are figured to be always just above what it would otherwise cost to use public transit. An organizational bylaw reads "as much with trains and buses, bicycles and feet as possible, and only as much with autos as necessary." Carsharing serves its members and the environment before it thinks about making money. It's one of the few service organizations that discourages the use of its most lucrative service.

Another initial rule was that car sharers could not be car owners. About half of the members joining Stattauto have made "painful" separations from their private vehicles. Other members generally either never owned a car, or had given them up long ago. But membership carries a great many benefits.

Stattauto's fleet has grown to about 60 motor vehicles of all different types, such as cars, pickups, and buses, along with the workbikes. In addition, bike and luggage racks and child seats can be checked out. The growth in membership pushed the development of car-sharing convenience technologies, such as the "Mobilcard", the magnetic card used to get into those safe-deposit boxes with the car keys. This card has Stattauto information on one side, and the other is a monthly pass for Berlin mass transit. Again, it can also be used for taxi charges.

One of the easiest ways out of auto ownership is the Car Co-op.

Stattauto is committed to researching and demonstrating alternative and appropriate forms of transportation. Not only does it support the use of workbikes, but together with Atlantis, an environmental

At left, car co-op members have access to many different vehicles: subcompacts, electric cars, station wagons, vans, buses. Right, the founders of Stattauto (Oswald, Carsten and Markus Petersen) with a workbike "Lasten-fahrrad", available for members to use free of charge.
Above. Whereas the average Berlin car is driven only 55 minutes each day, Stattauto cars are used intensively, making better use of resources. At least one-fourth of the environmental damage done by cars occurs in production. Technology association, they have developed the first car-sharing lot in Germany with solar-driven electric cars (E-Mobiles). On March 5th, Stattauto celebrated a high-profile opening of the first “solar service station”, a set of solar panels on a roof in Kreuzberg, with a “solar pump” below in the courtyard. The panels collect energy in the daytime, which is sold to the city’s electric power grid, and in the evening the two Stattauto E-Mobiles are recharged for the next day’s use. The pump is designed to give E-Mobiles only as much energy as the solar panels generate. Since carsharing is based on short urban trips, it is certain that the use of solar-fed electric cars (whose batteries have a 60km limit) will take off after these initial experiments prove themselves.

An expanding European CarSharing network (ECS) is based in Berlin, directed by Carsten Petersen of Stattauto. ECS organizations are found already in Switzerland, Germany, Holland and Austria, and are now starting up in Sweden and England. Berlin Stattauto members presently can use, without any bureaucracy, other carsharing groups’ vehicles in about 70 different cities. Members can take the train to these other cities and still have a car or bike to use when they get there.

Among the lofty goals of the ECS are reductions in both the number and use of cars, and support for cooperation between carsharing and public transportation. ECS affiliates, such as Stattauto, cannot maintain more than one vehicle for each 10 members, and the rates for car use must be above the costs for similar trips on mass transit. Car co-op members must have the right to participate in organizational decision-making. Carsharing groups set the pricing of their services to cover overhead and are not expected to earn any profit. Although the ECS-affiliated groups have tightly-controlled finances, social and ecological objectives must come before economic ones.

Within Stattauto a Members’ Forum has been active since the beginning. It has the authority to direct spending, among other things. Stattauto, and carsharing in other cities, is organized independently from government and bureaucracy, encouraging the participatory empowerment of the membership. ECS is similarly decentralized: a network of neighborhood-based groups that reaches across cities and countries. Stattauto organizers are committed to both ecological transportation and ecological forms of organization. It is their goal that the model of carsharing remain comprehensible, easy for others to repeat, and broadly affordable by the public.

What are the demographics of the current carsharing public in Berlin? The carsharing pioneers in Kreuzberg were younger, poorer and more idealistic than the average middle-class Stattauto member of today. Today’s member is 35, earns $2,000 to $3,000 per month, has a university degree, votes Green, is a teacher, architect or other professional, is idealistic but not avant-garde, and is a former car owner. Stattauto is working to expand its base.

Indulging ourselves for a moment, and using some very crude numbers, let’s assume that by the year 2000 Berlin is completely converted to carsharing, and has a population of 6,000,000. The city would then have only 600,000 cars parked on the streets instead of 2,000,000. This reduction of 1,400,000 autos represents a fantastic improvement not only in the urban ecology of the city, but a winning back of enough land to plant a million trees, or millions of flowers, fruit and vegetable plants. If the entire German population moved in the direction of carsharing, tens of millions of autos could be scrapped. Carsharing in the US could lead to the recycling of a hundred million autos!

The German groups are trying to help out new US groups with their Handbook for Carsharers that will be available next year in English with sections relevant to the
American experience. The book is a must read for potential carsharers. (To receive notice of the book's publication, send your name and address to RAIN, PO Box 30097, Eugene, Oregon 97403.)

According to Carsten Petersen of Stattauto, there are **three critical requirements for beginning new groups**: (1) there must already exist a public transportation system, as carsharing is only a complement to mass transit, and not a system in itself; (2) it must be expensive, or relatively so, to drive and maintain single-occupancy private cars; and (3) it must be difficult and unattractive to drive and park cars.

While the mass transit situation is somewhat embarrassing in the US, there's no doubt that private auto use will continue to become both more expensive and less attractive. Despite the overwhelming cultural popularity of the automobile, U.S. cities offer fertile ground for carsharing. And American pioneers, when they're ready, can count on help from the Old World.

"Es geht nicht so weiter, wenn es so weitergeht."
(It can't go on, if it keeps going this way.)
— Erich Kästner

A personal note: This story is dedicated to a girlfriend of mine, Leslie P., who died in a car accident in 1982. I've recently left Berlin, where I lived happily without an auto for one and half years, and returned to Seattle where automobiles are unfortunately still considered "necessary." In the future, life here could be a little less dangerous, and a little healthier, with carsharing.

**Michael Lafond** is an architect, artist and writer researching sustainability. He facilitates a class on these issues at the University of Washington, Department of Urban Design.

Right. A large set of rooftop solar panels recharge Stattauto's electric car fleet and pump electricity back into the utility grid. Electric cars usually cost more to purchase, but they sharply reduce in-city emissions. In the US, you can get a federal tax deduction for electric cars.
The Eugene Car Co-op

Twenty-seven percent of Eugene, Oregon’s population walks, skates, bikes, uses the bus, or carpools to work. The city’s wonderful alternative modes infrastructure makes it a natural candidate for carsharing. Empowered with a RAIN magazine article about Berlin’s carsharing organization, the German version of the Carsharing book, and a list of contacts, a committed group of seven people (including RAIN’s editors) created the Eugene Car Co-op. With faith in each other, we embarked on a great cooperative learning experience.

There followed months of ironing out hundreds of little details. Research and networking uncovered a surprising number of previous US carsharing projects. Information from the Movement for a New Society’s Life Center project of 30-40 car sharers and STAR (Short Term Automobile Rental), which served a large San Francisco apartment complex, clarified the reality of day-to-day operation, suggested viable rates, and helped us avoid costly financial and organizational mistakes. Here are some of the things we’ve learned:

1. Find a small group of committed people to make initial start up decisions.
2. Gather all the available information and make contacts with other groups at the beginning of the planning stage.
3. Be patient and be prepared to work at least 6-12 months from the first meeting until the beginning of operation.
4. Have most of the details figured out before you buy a car (rates, insurance, initial members, contracts, etc.).
5. Verify that potential members are good credit risks to save you time and energy at monthly bill collection time.
6. When you are ready to buy cars, consider getting used cars or donations to keep start up costs low.
7. Include bus passes, transit discounts and bike sharing in membership benefits. Make promoting alternative modes an important component of your organization, as well as make reducing the number of cars in your city a primary goal.
8. Connect with local pedestrian, bicycling, and transit advocacy groups and activists.
9. Register the name of your organization with the Secretary of State as soon as you agree on it. Beware of putting any group property (cars, literature, etc.) under another organization’s name before your relationship to that organization is legally formalized. Also make sure the other group’s Board of Directors is stable and accountable. If you do not legally formalize the relationship, your group could end up losing precious work.
10. Carsharing can start simply. The Berlin group began when a couple of brothers shared a common car while living in separate living spaces. They used an answering machine to coordinate the use of the car.
11. If you’re seriously thinking of starting a solid organization, than your group will save a lot of work and money by ordering the Eugene Car Co-op’s Carsharing Start-up Kit. The Kit comes both in printed form and on computer disk. It includes sample Articles of Incorporation and Bylaws, promotional material, tips on how to approach insurance companies, vehicle information, membership educational material, research material from other US carsharing projects, different car reservation possibilities, order forms for the upcoming US Carsharing Handbook. *The Carsharing Start-up Kit is copyrighted and is available for use by cooperative groups seeking to start carsharing for ecological purposes. The cost is $50.

If you live in Eugene and are interested in finding out more or in becoming a member of the Eugene Car Co-op, write us at: Eugene Car Co-op, PO Box 30092, Eugene, Oregon 97403, USA or call (503) 345-2708.

The Carsharing Start-up Kit

The Kit will save your group much time and money. It includes:
- A Copy of Short Carsharing Radio and TV shows
- Sample:
  - Membership Application and Cards
  - Organizational Articles of Incorporation
  - Organizational Bylaws
  - Promotional Brochures
  - Press Releases
  - Operational Guides, Sign in/out sheets, etc.
- Research on Previous Carsharing Projects

The Kit comes both in printed form and on computer disks. It is available to groups with a cooperative, environmental focus for only $50. Order from RAIN, PO Box 30097, Eugene, OR 97403, USA.
By Michael LaFond

In the middle of a city of millions sits an autonomous region of 65,000 square feet. It's both urban village and neighborhood center, with cafés, schools, clinics, a children's farm, theaters, alternative cinemas, innovative ecological projects, model community self-help programs, and housing for 60 residents and 40 visitors. It's also an international cultural and social attraction, drawing 300,000 people a year with its festivals, performing groups, and circus troupes. UFA Fabrik is Berlin's premier multicultural experiment in living, working and laughing together.

From seven people in 1972, the Fabrik commune has grown into an adventurous extended family of musicians, dancers, acrobats, clowns, craftspersons and other artists. The members pride themselves in being as diverse as the larger world around them. They are a “free” commune in that they have no particular set of beliefs or religion. They come together to explore alternatives and help build an active culture. As German news fills with neo-Nazis, failing economies and dying forests, it's good to see the UFA folks succeed. They work well, cooperatively and with a sense of humor.

These grounds have seen less tolerant times. In 1917, they became the UFA film studios, Universal Film AG. The company produced German propaganda during World War I and II. In peacetime, movies for profit and entertainment replaced those for patriots. In the 1920s, during Berlin's heady experimental years,
Above, animators in 1926 between shots on the set of Metropolis, filmed on the UFA site in Berlin by avant-garde director Fritz Lang. Left, the auto-free streets of the present day UFA urban village, whose cafés, events and community service projects draw 300,000 people a year. To reduce the impact of the visitors, the Fabrik runs many systems for composting, greywater use and energy efficiency.

Above, some goods are moved about the UFA grounds. The community provides home and work for one hundred permanent and temporary residents. Some of those are members of the wild UFA circus, below, who entertain their fellow Berliners and travel a European-wide circuit of alternative, international cultural centers, with which UFA Fabrik is closely associated.

such significant films as Metropolis and The Cabinet of Dr. Caligari were produced at UFA. What was left of the studio closed in the early 1970s, unable to compete with television and Hollywood.

The idea for a Fabrik für Kultur, Sport und Handwerk [Factory for culture, sport and crafts] developed in an alternative West Berlin neighborhood in the early 1970s. Cold-war money pouring into the isolated city, intended to keep West Berliners from leaving, had the unintended effect of making West Berlin a mecca for radical projects, and fertile ground for the counterculture.

An important environmental festival in 1978 motivated the Fabrik craft collective to look for a place where they could realize dreams of living and working together. They boldly, but peacefully, occupied the forgotten, demolition-threatened UFA studio grounds, and immediately opened their doors to the public. Great support was shown by neighbors, media people and other West Berliners. In a gesture of trust, they withdrew from the site just before a decisive city hall debate. The West Berlin Senate
granted temporary use, but only in three-month leased increments.

This was a wild, dream-come-true time, but serious questions of economic survival had to be immediately addressed. Studies and inventories were done on the deteriorated lot, and uses were considered for the long neglected structures.

Groups formed to create provisional spaces for housing, a Dojo, and the Trefpunkt Café [meeting place café]. This followed the Café Theory of Squatting, which stresses the value of an informal meeting place for squatters and friends from the “outside world.” Such cafés develop the necessary political constituency, bring in a little cash, and satisfy basic needs to socialize and celebrate.

Getting through the first winter looked difficult, since the heating system and many buildings needed rehabilitation. But the UFA financed the repairs with no government support, using instead proceeds from cultural presentations, donations, credit from the Berliner Netzwerk (a community co-op bank), private loans and countless hours of sweat equity. Even the Berlin Free School, a significant project involved in the occupation, was able to organize its space in time for the Fall 1979 school season.

Competitive thinking and traditional gender work divisions were set aside in favor of learning from each other. People developed their own interests and strengths, yet maintained a readiness to cooperate. Even their economics are based on a common money system, and the community provides work for all its residents, as well as nearly 40 others. UFA people say the community works on
the most advanced political model: *Gleichberechtigung*, or equality. Not to say there are no leaders, nor that everyone is identical, but that all people should be critical thinkers, and leaders in their own areas.

In these first years, UFA members developed the skills needed to renovate and maintain the grounds. Artists became metal workers, electricians and carpenters. On the weekends, the men and women went public with their second natures as performers, creating colorful and provocative programs that attracted great crowds to the UFA site.

The UFA Fabrik-Circus has always been a strong focus for the commune. It was an important time in 1982 when an English tentmaker taught the community to make a traditional circus tent. After many weeks spent creating the pieces, it was assembled and raised over UFA's circus ring, creating a home for their entertaining, low-tech mix of variety, cabaret, music, and unserious magic.

Contacts developed through decades of successful networking now enable Fabrik members to organize international projects, in addition to their locally-oriented theater, dance, music and cinema. In 1989 they coordinated the Mir Caravan [peace caravan], which started in Russia and travelled across Europe performing circus and street theater. Their Trans Europe Theater Festivals bring together in Berlin some of the best experimental performers from around Europe.

People come to UFA for all kinds of special nourishment. After all, *du bist, was du ißt* [you are what you eat!] The first modern food co-op in Berlin was organized by the original Fabrik community, in the Schöneberg district, to provide themselves with organic food. In the Fall of 1980 one of the first whole-grain bread bakeries in Berlin started up at the UFA. The bakery now produces more than 3,000 loaves a week, along with pastries and other delicacies. UFA bread sells in the adjacent Bio-Laden (an organic foods store), in UFA's Café Ole, and other alternative shops around the city.

Since the beginning, UFA members have worked in many ways to improve their "quality of life", meaning also improvement in the quality of their ecosystem. This prompted a number of pioneering efforts, including the food co-op's connection to local organic farmers. The UFA's intensively-used, small village design provides challenges and opportunities to develop a decentralized, ecologically sensitive infrastructure for community resources.

UFA members experiment with demonstrations of solar energy, roof and façade greening, composting, greywater recycling, bio-gas systems and windmills. They found building ecologically to be costly in the short-term, so they developed systems that could be realized in small steps. With the security of a 35-year lease, UFA is now carrying out major ecological renewal projects, including extensive improvements in energy and water systems, façade and roof greening, and recycling/composting programs. The community was fortunate to be selected as a demonstration neighborhood for such initiatives, receiving some financial help from the city and the European Community.

An unusual machine supplied energy in the early years at UFA. The experimental co-generation system, built from a recycled diesel truck engine, produced electricity and heat for local use. To increase their energy independence, and further reduce resource consumption and emissions of CO₂ and other gases, two modern “block heating and energy power plants” (BHKWs) have been installed. These co-generation plants cover 80% of community electrical needs, and provide for all space and water heating. In addition, the Fabrik carries out many projects in building and pipe insulation, and energy and lighting efficiency.

Water in Berlin is extremely costly. In an exciting new project, rain water is collected from the village and stored in a cistern based in a renovated underground vault. A "green filter" built next to the cistern biologically treats this water in a pond with plants. From there it irrigates green roofs and flushes toilets for countless thousands of UFA Fabrik visitors. A great volume of water is used in the café for washing dishes, and this will also eventually be collected, treated and reused for plants and toilets.

---

**The Café Theory of Squatting stresses the value of providing a meeting place for squatters and their friends from the “outside world.”**

---

*At right,* guest housing at UFA Fabrik. Visitors from around the world flock to this exciting art community at the old film studios. Film is still an active part of the site, with many independent filmmakers and visitors using the facilities here. UFA has a number of film programs, including a cinema café that's a major gathering place for aficionados, and theatres for alternative and historic film.
Above stands Juppi, one of the founders of UFA, in front of the Fabrik offices. The entry behind him sports a newly installed thatch portico. It's one of hundreds of large and small modifications made to the ugly, '50s-style industrial Bauhaus buildings the collective found on the site upon arrival. Even bad structures can become good ones with enough effort. Below right, the logo of UFA’s NUSZ, or Neighborhood Self-help Center. On the Opposite page, a rendering of the popular Bäckerei, or bakery, at UFA, one of the first in Berlin to produce whole-grain breads in modern times. Adjacent is the UFA organic foods store, Bio-laden. Both are strongly connected to local farmers.

UFA members hope to gain the experience needed to make greywater recycling a reality in their community in the coming years.

Most UFA buildings are representative of industrial architecture and urban design of the 1950s: flat roofed, topped with tar paper, and surrounded by pavement. As such, the grounds generated uncomfortably high temperature swings in the summer, and lots of dry air and dust. So members began a building greening program in the 1980s. So far about 8,000 out of 24,000 square feet of roof surfaces are already green, as well as 2,000 square feet of ground and façade surface area. The added vegetation has noticeably improved the local microclimate, modifying both the humidity and temperature. It has also reduced the levels of noise and dust, improved insulation, and created new habitat for plants, birds and insects. In addition, the green roofs and façades help to retain and filter rain water before it gets to the cistern.

At UFA Fabrik’s recycling station, separated wastes are either processed or sent to be recycled elsewhere. Organic wastes coming from the café and the children’s farm animals are now sent to “fast composters” (Austrian hand-rolled drums) that reduce the composting time from six months to two. Part of the UFA Fabrik’s food wastes are fed to the farm animals, and the compost is used in the community as much as possible. Out of the yearly generated 1000m² of various wastes, about 150m² can be composted and reused. Through a combination of programs, the total waste volume is expected to be reduced by up to 40%.

In connection with the ecological renewal program, an exhibition, including a detailed site model, drawings and diagrams, is housed in a small, greened building. This is only one of many public education programs at UFA.

Several projects, including some that had been with the commune from the beginning, came together in 1987 to form the NUSZ, a Neighborhood Self-help Center. Some NUSZ projects, such as pre- and post-natal workshops, and the children’s farm, now receive a bit of financial support from the Berlin Senate. Central to the work of NUSZ is making space available for social and preventative health programs, such as meditation, martial arts, and socially healthy festivities bringing together people of different ages and cultural backgrounds.

The NUSZ is founded on the idea of self-help, or personal and social change through self-initiative. While our society gives us a lot of free and leisure time, it steadily eats away at our free space, our freedom to consider alternatives, and our confidence to think and act creatively. There’s a German motto that captures NUSZ and other UFA Fabrik activities: Bist du heute nicht mobil, wirst du morgen zum Fossil [if today you’re not active, then tomorrow you’ll be a fossil].

Children also need this liberation. At UFA’s Children’s Farm, kids care for horses, pigs, and chickens, work in the garden, play, cook and eat together, and just hang out. They also train and perform over in the children’s circus school, catching the thrill of the stage. UFA’s Berlin Free School still needs official recognition, yet some 40 kids (including UFA children) from 1st through 6th grades, learn according to their needs, with no anxiety over scores or pressure.
from inhuman schedules. With no physical division into grades, the kids learn much from working and playing with older and younger students. Everyone gets lots of attention: one helpful adult for every five children. Activities break through the standard barriers between learning, home, and work, that mysterious world of adults. The school is completely woven into the life of the village.

UFA Fabrik manages to bring all these pieces together in a beautiful way. It’s a mix that satisfies members, and attracts hundreds of thousands of others to see and experience this revolutionary yet sensible activity. Visitors go to hang out in the café, to dance and play music, or even just to walk on the village lanes and paths, well framed with plants and pleasantly overgrown with bushes and trees. While the UFA sits in the center of a great metropolis, and has a high concentration of people and activity, it’s organized on a small, more human scale. Autos aren’t seen or heard. The dominant sounds come from people on foot and riding bikes, with lots of playing kids, barking dogs and chirping birds. This utopian microcosm encourages people’s involvement, inspiring many to take chances in their lives. The UFA successfully blends culture with politics, and gives everyone a good time in the process.

Not long ago, I stopped by to meet with Juppi, a central community figure, circus performer and original Fabrik personality. We had arranged to meet in the Café, and getting there a little early I sat at a corner table to think up some good questions. Juppi came in shortly with his three “circus dogs” and joined me after saying hello to a few others in the Café. While we talked, other UFA Fabrik folks could be seen coming and going, dropping in to chat, to get a cup of coffee, or to see who else was there. Suddenly a group of kids came running in from the school across the way, dressed up in bizarre costumes as part of the German Fasching holiday. They went around the Café asking everyone questions for some school survey project.

Our conversation drifted into the areas of ecology and community history. Juppi turned and pointed to others who knew more about these things, Woerner and Sigi, who happened to be seated at another table. He suggested I find them after we were finished. As Juppi explained it to me, the community has monthly assembly meetings to formally make decisions, but the real political and cultural change happens every day. UFA Fabrik members see each other all the time, and so can carry out their business informally. What they do for work is not much separated from what they do in their free time, or what they do for fun, or even from what their kids do.

Juppi emphasized that the UFA is just one example of what people can do together, and not an answer for everyone. Even after accomplishing much, the Fabrik members are still learning. They remind us that we all need to find our own way, and provide ourselves opportunities to work creatively for what we believe in.

Anyone can visit UFA, or contact Sigi for information, at UFA Fabrik, Viktoriastrasse 10-18, 1000 Berlin 42, Germany.

RAIN Summer 1994 Volume XIV, Number 4 Page 13
Recently, fates converged upon sleepy Eugene, Oregon to create a fascinating controversy. As a story involving participatory democracy and the human-built environment, it's one of the most revealing in the latter part of the 20th Century. Most Eugenians, however, don't see it this way. Panic, froth and potent disinformation spilled into the local media, so coloring the story as to obscure the subject.

In the aftermath, few have the will to examine what happened. That's unfortunate, because the implications are far-reaching. Christopher Alexander's latest project, with its laudable ecological and social goals, was nearly dismantled by institutional disregard for people. Ironically he addressed that very problem in another inspired program, in this same community, over twenty years ago.

By Greg Bryant

Certain places simply feel good. Perhaps it's that lively public square where you meet with friends, or a nook of profound solitude, or the little paradise outside with the bench, the old tree, the warm-colored wall and the perfect sunlight. It doesn't take an expert to know that these spots are just right. So why do architects and planners usually make these judgements for us?

Instead, perhaps ordinary people should design their own surroundings. In 1970, the entire University of Oregon campus became a testing ground for this idea. The creator of the new plan, Berkeley Professor Christopher Alexander, was an architect himself. But he believed that, given the alienating results of modern construction, normal people must know more about humane habitat than professionals.

Passing control to the campus community became known as The Oregon Experiment. The foundation of the plan was the user group. Alexander wrote that "all decisions about what to build, and how to build it, will be in the hands of the users." This meant, among other things, that students, faculty and staff destined to use a new building would design it themselves, with the help of architect-facilitators. The results were excellent: people know a great deal about what they like and need. Many even felt the experience to be, in some way, profound. Soon the Oregon campus became world-renowned as a working model of participatory planning.

The user group, however, was only part of the plan. People should decide their own fate, fine, but how do you keep outside forces from messing up the process? To start, Alexander suggested that the planning office keep most projects small, letting the campus grow through careful, gradual construction. This way users could work at a human scale, and a human pace, and the administration wouldn't feel so tempted to tamper with all those little projects. A student-built bus shelter, arts foundry, and other amenities were created to demonstrate the natural, graceful effect of piecemeal growth.

To keep users from feeling lost in so much unfamiliar design work, Alexander provided an encyclopedic set of suggestions for sensitive architecture, known as a pattern language. He later published an absorbing, best-selling...
The Oregon Experiment, begun on the University of Oregon campus in the early '70s, set out to prove that humane, sensitive architecture was possible through the deep participation of the campus community. Opposite page left, the art department's foundry, an early result of the Experiment, designed and built by students and faculty.

book under this title. Patterns are something like rules, but not so authoritarian. As certain aspects of language can contribute to good sentences, patterns are meant to help people make good human space. For example, one pattern argues for mixed-use buildings: students should live in small clusters intimate with workshops, libraries, labs and other activities. The resulting social brew is a natural stimulant to education and research. Patterns keep this kind of insight active in community memory.

The Experiment encourages user discovery of useful patterns: "the collection of formally adopted patterns shall be reviewed annually at public hearings, where any member of the community can introduce new patterns, or revisions of old patterns, on the basis of explicitly stated observations and experiments." In this way, the University could study itself.

Alexander introduced another annual exercise known as diagnosis, a poll of people's feelings about nearly every piece of campus. The results were to be publicly reported, undergo community revision, and guide future change.

In Alexander's experience, opinion based primarily on feeling is a perfectly good foundation for community planning. "The myth that's being propagated is that everyone feels differently, that the communality is on the order of 10% and the difference on the order of 90%." He believes that regarding environment, the opposite is the case. People working to improve the humanity of a given spot mostly agree.

But the harmony disappears, and the goals become elusive, when groups are bombarded with tough-sounding technicalities. When these dominate, planners and development professionals usually win the ensuing arguments. Really, there needn't be such fear of citizen intuition since, says Alexander, "no one is going to claim to have good feelings about a traffic hazard."

If people's senses are given priority, a group can take into account "the emotional life of children, the feelings of an old person walking up and down a street, the atmosphere surrounding someone buying a pound of tomatoes", and in that context, necessary structural points can be discussed. This isn't difficult to do, as long as the process emphasizes making things better, not just fulfilling dead requirements.

Campus planners took these ideas to heart, along with other material in the plan, and made some solid strides
Towards implementation. After helping out with trial projects, Alexander left the Oregon campus. The Dean of Architecture and Allied Arts at the time, Bob Harris, felt this made sense, “he said ‘look, if the only architect who can make the Oregon Experiment work is Chris Alexander, it won’t mean anything.’”

Over the next decades, Alexander developed an international reputation for fighting cold and insensitive architecture, promoting instead a more satisfying and ecologically sound system of design and construction. His demonstrations of low-cost, high-quality, user-designed homes still set the standard for housing development.

In 1991, he was asked back to the University to facilitate the design of major new student housing. He knew that the Experiment hadn’t turned out quite as intended, but assumed that the work environment “would be pretty comfortable.” He received quite a shock. Fundamental pieces were missing from the plan he set in motion. He soon became one of the most recent victims of these omissions.

Today, most people on campus have no idea that an Experiment exists. The democratic safeguards, the annual reviews and diagnoses, have disappeared. Campus planners blame this on a lack of resources, but these events could be easily organized by faculty and students. Only a handful of people are now involved in what’s left of the process. Some find it empowering, but others quickly find its limits.

Most users never look at the plan itself, published by Oxford University Press as a concise, easy-to-read book. The Oregon Experiment is a planning classic, still in print after nearly two decades. Many users imagine the book to be merely a philosophical statement. In fact, it describes a working system in great detail.

Alexander designed this process to protect users from power, money and bureaucratic inertia. But over the years those forces have swallowed the notion of the user group, and allowed the protection mechanisms to atrophy. Administrators and participants use some patterns, mildly engaging in user design, but community control does not exist. The planning office was never politically able to implement this, and so has forgotten it. The University President’s office does not see any problem: they feel the Experiment “evolved” for pragmatic reasons. This self-deception, not coincidentally, gives the administration unilateral control with a useful gloss of community responsibility.

Campus planners created dozens of buildings under the Experiment, and under normal conditions users were satisfied, happy to be involved at any level. But according to a former student of Alexander’s, Jerry Finrow, now Dean of the UO School of Architecture and Allied Arts: “project funding is a politicized process that has only limited concern for overall campus quality.”

Many projects were rushed, some were huge, and a few suffered from battles over money. Most seriously, some were removed from the Experiment altogether to satisfy the whims of donors or administrators. One example, a new high-tech Research Park, is a pet project that is, according to Finrow, “of inappropriate scale and complexity, ignoring significant campus open space concerns”. Many also

Most of the nicest spots recently appearing on campus were token rewards offered by big, damaging projects: the pleasant corner of benches at left sits by a lake-sized parking lot. A big new science complex took the former site of the Museum of Natural History, which received pocket change to build the beautiful building above. Below, new art studios designed with the help of students.
consider the park to be a trendy, ill-conceived waste of money. It was a major target of community activists, but was built regardless. In another case, the Business School received donations for a strident gateway, and a gross brick bunker known as the Chiles Center. These displaced an inviting campus entrance and early Oregon Experiment success. Administrators apparently weren’t interested in playing tough with a donor’s location preference.

User groups are certainly not in control of this process. The highest level user group, the Campus Planning Committee, has no authority, merely advising the President’s office. This collection of busy professors and transitory students is easily manipulated, as are other...

Despite the use of the Experiment’s democratic terminology within University administrative circles, the physical evidence overwhelmingly suggests that nothing remotely approaching the plan actually exists at the University of Oregon. The two new smiling plate-glass office buildings above are unremarkably typical of modern, politely accepted, cold-blooded schools of design. Above left, the latest addition to Lawrence Hall, which houses the School of Architecture and Allied Arts. Originally built in the ’20s with rustic Art Deco ornament, the building continually suffers from trendy amending and remodeling. By the time of this most recent addition, the Experiment had long since atrophied within a bureaucratic body-cast.

Above right, the infamous University Riverfront Research Park, a costly attempt to hop onto the high-tech bandwagon, with office floors that should encourage Silicon Valley computer executives to indulge in their fondness for cubicles. This project was so controversial that it was officially removed from the community decision-making process. Left top, millions from Nike’s top executive, a University graduate, poured into a library addition so disrespectful of people that it might act as a deterrent to education. This extremely expensive semi-circular wooden bench is topped by an ornamental trim that makes leaning back impossibly uncomfortable, and the foot-rest is just a bit too far away for anyone’s legs. The first thing found upon entering the library is this endless hallway, left, the inside of a submarine in pastels. Terrifying, windowless: a miserable prelude to finding a book. Many components of Alexander’s plan, clearly ignored, would have made such a design impossible. The badly misplaced gate, left, creates a subtle damage also warned of explicitly in the Oregon Experiment: avoid cutting off the campus from the city—don’t turn the University into a glorified high school. The giant gate is a model demonstration of this effect: it cuts off visual contact between popular on-campus and off-campus hangouts directly across the street from each other. The effect is compounded by a business building, the Chiles Center, left bottom, a cruel, unresponsive brick fortress, that inserted itself upon an active, prominent campus corner at the whim of the donor. Certain new buildings feature quite arbitrary and disorienting postmodern ornament. The cold, unnatural Science Complex, right, sports dozens of excess columns. Filmmaker David Heine quips, “Apparently Science has lost faith in The Arch.”
Above, a piece of Alexander’s design for the Amazon site, commissioned by the University of Oregon, intended to enhance the sense of community often found in student housing. The urban village could also demonstrate that sturdy, sensitive, high-quality multi-unit dwellings, of a kind rarely found in the US today, can be built for the same price as standard dormitories or motels. Below, the floor plan for one of the Agate street prototypes of the Amazon housing, with studies, window-seats and alcoves for the benefit of students.

The housing market, and a practical one, since they had no confidence in their ability to fill housing at regular rents.

These quandaries burdened every aspect of the project. Despite the Experiment’s call for open discussion, none of this was aired publicly. Administrators hoped to smooth over problems and get on with the building assignment. Officials don’t really see the Experiment as something that constrains them: it’s for architects and users, no? Somehow, blow-ups over past projects had not shaken them into worry about their process.

Though the administration is responsible for its general lack of planning insight, it’s only partly to blame for the particular tumult that was to come over housing. The extreme behaviors of the University in this matter, which were to include shuffling user group members, breaking arbitration, and altering signed contracts, came ultimately from the State mandate to build. Force an unwilling institution to do anything difficult, even to help poor tenants, and its fragile democracy is bound to crack.

Alexander couldn’t know any of this was about to happen. He simply geared up for a challenging project. He braced the University with encouragement: they could indeed build student housing at costs competitive with the market, especially in the long term. Not only that, but the
At right, prototypes for the Amazon village — Alexander’s Agate Street Student Housing near the University of Oregon campus. Built on budget, for about $40,000 per unit, these twenty apartments will stand easily for over a century. Maintenance costs will also be very low: the high-oil cedar siding requires no paint, and the masonry base, extra roof flashing, and rot-resistant stairway design will retard the effects of Oregon’s heavy rains. The units are massively insulated, both for energy efficiency and to prevent noise from traveling between neighboring walls. Each of the 20 units is different in plan, many radically, making it impossible for residents to feel like just a number. One of the most important features is the usefulness of the outdoor space. All ledges are seats. There are beautiful garden paths between the buildings. The front porches are deep enough to put furniture on, so one can sit outside during a rain. The deep green roofing, rich and colorful cedar siding, spirited roof caps and imaginatively arranged fencing make the immediate outdoors particularly inviting for the community. The central courtyard adds to the sense of security, and the pleasant gates and fences protect children from the street without being oppressive or obtrusive. The dormers, multi-level porches and window-seats draw attention to the outside from the inside, and soften the border between the two. All this is quite a bargain at $40,000 per dwelling. But when the University administration set out to sabotage the project, they misled the press and others regarding the costs and the configuration of the apartments. One of the twenty units has two small bedrooms, perfect for a couple and baby, or perhaps a couple needing an extra study — but since it was on the ground floor officials showed this unit first to visitors, implying that the entire complex had small bedrooms. Although Alexander did shave off bits of square footage in order to save money, careful layout makes almost all of the apartments feel strikingly comfortable.

buildings could set new standards for beautiful, sensitive, and practical living spaces.

Contracts were signed and research begun. But the University was still reluctant, leading to strange decisions and stranger delays. Eventually, a user group for the housing began to meet. But a silent bomb was thrown into the works.

The University decided to tear down hundreds of units of existing low-rent housing, known as The Amazon, to create a clear site for the new buildings. The Amazon units are rather old and rickety World War II temporary housing, so at the time this decision must have made a certain sense. But it wasn’t particularly sensitive to the low-income students already living there. Many found the new housing’s projected rent increase to be unaffordable.

Eventually, some of these very residents were moved into Alexander’s user group. This inserted unresolved political issues into a discussion of design, among people with no political power. How could such a team function? It didn’t. This could be predicted by anyone who had digested
Above, the Agate street prototypes. Above left, note that there are five different types of window here. Alexander has found that windows and dormers are best sized and situated on site, where the best shape and placement can be determined according to view, light, effect on rooms, etc. Above right, one of the most striking features of the Agate housing are the many grand old trees that were preserved. The buildings were designed to fit in and around them, unusually sensitive for government construction. Below, once students questioned the University's decision to put housing on the Amazon site, the administration panicked and successfully used Alexander as a scapegoat.

the Experiment: no design group, or plan to build, should even exist for a project the community finds unacceptable. Even after the tension was painfully evident, the University continued to let the group stew. The arguments that surfaced in these meetings were, not surprisingly, a little surreal. They were also particularly revealing.

Alexander was trying to build low-cost housing of extremely high human quality. To this end, he asked the University to set a per-unit price: with this money he would build something far more livable than the average alienating, motel-like student hovels.

The students, justifiably concerned over the dismantling of their old low-price rentals, argued for the cheapest possible construction. They hoped that this would keep the rents at affordable levels. Alexander tried to explain that the price of the housing was not set by him, but instead by the University. The functionaries present naturally wanted to avoid responsibility for unpopular site and price decisions, so made no effort to back him up.

In any case, the cheap buildings that the students wanted would not automatically be as inexpensive as the older units. The old housing is only cheap today because there is no "mortgage" left to pay. On the other hand, new units would be built with borrowed money, so they couldn't compete with the old rents.

Alexander fought hard in the group against proposals for thrown-up structures. If you build inferior housing, it just falls down by the time the loan is paid off. So, decades from now, new borrowing would be necessary, keeping rental prices always close to market levels.

For student housing, the secret to low rent is longevity. Well-made, 100-year housing will be dirt cheap after the loan is paid off in thirty years, so generations of students will benefit from it. But low-income students looking at their own slim budgets are, for very good reasons, not so interested in students thirty years from now. Consequently, this straightforward analysis of the long-term public benefit became lost.
This page: The existing low-cost Amazon student housing, erected as temporary residences for returning WW II veterans pursuing degrees under the GI Bill. The University wants to demolish these units, and given the present political conditions this would truly be a shame. Alexander’s inspiring design for an urban community on this site would certainly make a terrific place to live and study — but the University administration does not intend to build it. Given their recent bloody-mindedness they would instead probably replace this charming, if flimsy, village with something far worse. It is clear that the University, now trying to privatize and attract wealthier students, is gentrifying and distancing itself from its role as public servant, arrogantly looking upon Amazon as an underclass embarrassment. Alexander, unaware of all this, was abused by the administration towards these ends, as demonstrated by the University’s mad efforts to push up the cost of his buildings. Consequently, the best reason for preserving the Amazon is political: the buildings are symbolic of a commitment to public education that Universities around the country are in danger of losing. The Amazon tenants are fighting to achieve historic preservation status for the buildings, and turn the site into a student co-op, in that case becoming one of the largest in the US. It is a shame that the University’s doubletalk to the press, elitist power plays against the tenants, and nasty mudslinging against Alexander, made the best solutions impossible: one where the new designs would lead to a beautiful, low-cost student co-op village, perhaps on another site.
Left: student-run, student-built. The best kinds of education emphasize the practice of self-direction and cooperation. Left top, the Campbell Club Co-op at the University of Oregon, one of three buildings owned by Eugene's Student Cooperative Association. Residents describe life in these houses as a continuous exploration of real democracy. Left bottom, once again, the U of O foundry, designed and built twenty years ago by students. Each facet and function of the University could improve through this type of fundamental faculty and student involvement.

Even if it hadn't, Alexander would face a final hurdle. As the pressures compounded, the group lost interest in producing nice places to live, despite Alexander's guarantee to build very special dwellings for the same price as junk. Since students, and administrators, believed this to be impossible, they proclaimed it undesirable. This was more than a little frustrating for the architect, who feels strongly that poor people should not be forced to live in bad buildings. That students and staff ultimately disagreed with this is particularly frightening, and exactly opposed to the intentions of the Experiment.

Apartment dwellers these days live in minimalized housing: boxes for storing people when not at work, school, or driving around. Add a television, and no one seems to care what the space around them looks like. Through the abuse of resources and people, mass-produced pre-fab housing is cheap and turns a quick profit, making investors interested in neither durability nor livability. People have, in a way, adapted to this kind of housing, and see nothing wrong with it on paper.

But rooms, windows, porches and courtyards should be shaped carefully, to nourish people, and give them connection to nature and neighbors. Alexander specializes in making human-scale spaces at low cost. Sometimes this involves trades. For example, to save money Alexander planned to reduce the square footage a little bit. This caused an uproar in the pressured design group. Americans are addicted to excess room: it's the sort of limited freedom that people living in prisons cherish. Under more reasonable conditions for discussion, people normally agree that slightly smaller, well-designed rooms with usable outdoor space are preferable to large cardboard crates on a parking lot.

In this fashion, cost, durability, and quality became "issues" in a design group which should not have existed until the political problems were publicly resolved. The upshot was a public firing of Alexander, sacrificed to take the heat off the University. The administration continues to move to tear down the Amazon, but has no intention of replacing it with Alexander's careful, user-informed designs.

Students today are trying to prevent the demolition in the political arena, and difficult design meetings are still being held, only without Alexander. There exists a proposal to make the old Amazon into an independent cooperative
village for low-income students. This is of course a wonderful idea, for both the town and for students: the University is not a very accountable landlord, as bad as many others in Eugene. But it's terribly unfortunate that cooperation-minded, impoverished people, struggling to get an education, won't benefit from Alexander's durable, community-enhancing constructions. They will instead get 50-year-old temporary housing in ghetto-like condition. The heavy maintenance needs of the site might destroy a cooperative. None of this seems right. It's extremely frustrating to watch.

Given that a brutal battle still rages between administrators and students over the Amazon, this kind of analysis probably looks like a luxury to the combatants. Many get by with the diplomatic, but not really useful, characterization that everyone is somewhat to blame: students, administration and architect. Others see it as a simple lack of management ability on the part of the University. It's sad that the level of discussion under the Oregon Experiment has degenerated to looking for personality defects.

The Experiment persists in name because its principles still resonate within the University's body politic.

The situation cries out for deep community discussion. Every major University project in the past decade has serious problems swept under the rug, to the point where a strange, dysfunctional process is endemic. The campus community is abused daily by senseless infrastructural changes emerging from cloistered compromises. The fact that the University is owned by the State, and not the city, gives the surrounding community too limited an influence. And faculty, students and staff are so busy in their daily work that they have neither time nor incentive to investigate possibly fundamental problems.

It's instructive to see how these problems fleshed out in Alexander's delicate housing work. For example, his Berkeley team spent months researching patterns for family student housing, and built full-scale mock-ups of different potential units. Very excited about the results, Alexander wanted to construct the mock-ups, free of charge, in Eugene, to show users. But administrators tried to prevent this. Cutting off the architect-facilitator from users would be inconceivable in the Experiment as written. But officials only think hard about the Experiment when it gives them ammunition to defend their immediate political agenda.

In the thick of things, Alexander was attacked with a pattern he himself had written, by people who were unaware of this. It regarded a call for "small parking lots". Because of site constraints, many little parking lots, and their access roads, would have permeated the housing project, destroying much of it. Alexander suggested some alternatives, to protect the community social spaces. Given that people were upset with him for defending nice housing, these suggestions were attacked for being contrary to the Experiment. Certainly, he says, "I didn't just jump up, and salute smartly, every time a pattern was mentioned." In the decades since he invented patterns, he'd found many ways to resolve such design problems, but didn't get an opportunity to explain them. Or much else, for that matter.

Since he moves against establishment thinking, Alexander sometimes startles people with his techniques for saving money and increasing quality. If users were comfortably in control of an agreed upon project, they could openly discuss the value of such methods. But the group had slid back into the standard world of modern construction, with its ideological certainties. When Alexander's team found beautiful cedar siding at the same price as cheap pine, so outside walls wouldn't need paint for at least a century, officials refused at first to accept it. He could not understand why everyone was making "absolutely certain that their preconceptions could not be rocked by reality."

Some of Alexander's techniques for improving quality are actually very old-fashioned. Take windows, for example. He has found it preferable to decide window placement while construction is underway. This was common practice before the age of pre-fabrication. The view, the light, the effect on space, the connection with the street, the overall feeling, cannot be properly determined until you stand in a half-finished room. Despite his explanation of this, administrators, at this point looking for a scapegoat, announced that the architect didn't know how to draw windows into construction plans. Denouncing good ideas through character assassination debases the educational mission of the Experiment, and the University for that matter.

In 1970, Alexander was aware that good buildings couldn't be built without the involvement of ordinary people. He hoped he could just open up the floodgates of democratic design, and inhumane buildings would become a nightmare of the recent past.

But the kind of democracy he was looking for, deeply participatory, careful and broadly empowered, simply didn't exist in this country. That it could develop at a large State institution, unlikely as it may seem in retrospect, was particularly exciting to everyone at the time. Unfortunately, administrators are employed to be neither visionaries nor grassroots organizers. Under the daily grind, they couldn't see that a big job was left unfinished.

The Experiment persists in name because its principles still resonate within the University's body politic. So although there are no empowered advocates of these remarkable, achievable ideals, they could certainly be revived in their birthplace. Students and faculty could run a real community. Staff might suffer less. And the campus could be filled with those wonderful places that make people feel alive.

RAIN  Summer 1994  Volume XIV, Number 4  Page 23
Block 6

An Integrated Water Concept

By Michael LaFond and Ekhart Hahn

With the reunification of the east and west halves of Berlin, Block 6 is once again found in the center of the city. While Block 6, in the southern part of the Friedrichstadt neighborhood, was once an attractive quarter, and home to the old Philharmony, it was turned into a no-man's-land by World War II. Urban "renewal" plans after the war cleared the site of all but one building. A public housing project was built there in the 1970s, and in the 1980s the block was finally rediscovered and revalued by the activities of the IBA (International Building Exhibition). As an IBA project, 106 apartments were built in a way that respected the old block structure. Together with the existing building, they enclosed an expansive courtyard which offered the necessary space for a decentralized, natural water treatment system.

Block 6 is in essence an example of a wholistic and localized approach for the treatment and use of greywater and rainwater, and a sparing use of drinking water. Noteworthy is a socio-ecological design which provides the local residents with opportunities to experience water in ways that can encourage a greater respect for this often abused element of life.

This pilot project was designed to help answer three research questions:
1. What are the possibilities for realizing water and environmental conservation through consistent application of
Left. As part of an international building exhibition project, 106 apartments were created, attached to older housing blocks, forming an expansive courtyard and natural water collection and treatment system. Over a square kilometer of greened roofs help the local microclimate by retaining approximately 70% of the rain water falling on them, and filtering the overflow that drops down to the rain water collection pond, right top. All rain water is retained on site, kept in a natural pond surrounding structured wastewater ponds. These central ponds use a wide variety of plants to filter greywater coming from the apartments. Some of the treated water is fed into the ground and the rest makes its way back into the apartments' greywater systems. The rain water pond has a natural edge and is planted, making it attractive and drawing people into contact with the water's edge, right middle. The residents have many opportunities to come in contact with the water in various ways, and since the design is meant to make the treatment of water visible and comprehensible, they become naturally familiar with water issues. The complex open spaces offer a range of pleasant experiences, and are used intensively for both spontaneous and planned affairs. At right bottom, kids from the neighborhood school have gathered for a party. The social and ecological aspects of the experimental design complement each other, creating a community both more self-sufficient and mutually supportive.

Currently available water-saving technologies, decentralized biological treatment systems and water recycling in inner-city areas?

2. How might the behavior of the residents develop towards supporting water conservation? How do residents react to a simultaneous offering of environmental information programs and user-friendly system designs?

3. What quality of treatment can be achieved by a decentralized, biological water system? Is such a system appropriate for urban areas, and what are preferred locations for its application?

Block 6's water systems were built with the financial support of federal
Building programs and the Berlin IBA. The project was planned in 1983-84 and carried out between 1985 and 1988, while corresponding scientific research ran from 1988 until 1992. The integrated water concept was conceived and developed by the AG Öko (Arbeitsgemeinschaft Ökologischer Stadtumbau/Working Group for Ecological Urban Restructuring), who also coordinated research up until 1990. The integrated water concept at this apartment complex includes the following technical and social measures:

**Water Sparing Fixtures and Technologies:** Drinking water is spared through use of efficient toilet systems that use only 4-6 liters in flushing, and incorporate the possibility of interrupting the water flow. Water faucets have built-in outflow-reduction valves, and there are meters in each apartment for measuring cold, warm and recycled water use.

**Heat Exchange Technology:** Heat is regained from waste water with a heat-pump for the preheating of warm water.

**Waste Water Treatment:** Waste water is separated into grey and fecal water streams. Greywater is treated (also sewage water in a future stage of the experiment) in a pond system of water plants (mainly reed and rush plants).

**Rain Water Handling:** All of the rain water is retained on site and kept completely separate from the waste water system, which is contained in a series of formally organized ponds. Greened roofs (about 1000m²) retain about 70% of the rain water falling on them, act as filters for the overflow, and positively influence the local climate. A naturally designed rain water pond is fed by the roofs via a separate filtering pond. The rain water pond’s edges are planted with a rich variety of water plants, and it functions as a swimming and play area for the children.

**Recharging of Ground Water:** Part of the treated greywater and rain water is fed back into the ground.

**Drinking Water Substitution:** Drinking water is replaced by treated greywater for the flushing of toilets and watering of plants. A parallel piping system is used for drinking and service water.

**Open Space Design and Recreation:** The ponds are integrated into a landscape based on socio-ecological principles, wherein a diversity of views and a range of natural elements and materials are made accessible. As a result, the residents can see and directly experience the local water circulation systems. Even the landscaping materials have been recycled: they reused old foundation material in the building of new support walls for the residents’ gardens.

**User Concept:** Residents were selected for the new
At right, Block 6 and its orientation in Berlin's historic Kreuzberg district. The site is near the intersection of the neighborhood's water canal and the former border between East and West Berlin, along which the Wall used to run (thin dashed line near oval on right map). Below, natural areas in the main courtyard are large enough to offer solitude through spaciousness. The gardens invite residents outside, encouraging them to visit each other more often than in a typical apartment block. As a consequence of giving people usable outdoor space, they have more freedom to change their patterns of daily life at home. The variety and flexibility of the outdoors not only reduces stress, it suggests possibilities to those stuck in modern life. Below, the central area offers a safe yet seemingly boundless region for children to play in. This gives kids free reign to explore the natural world, while they are watched over by the surrounding urban community.
apartments through the normal process followed by the Berlin public housing authority. Through seminars and written information, they were informed in detail as to the functioning of the water circulation systems in their block. The objective was to encourage conscious and responsible use of water and chemicals in the households, and involve people in planning and decision-making.

A regular resident information and participation program related to the water concept was initiated in the context of an accompanying scientific research effort. Changes in the attitudes of the residents were thus identified through surveys and interviews.

**Waste Concept:** Waste reduction is also a priority. The wastes generated are divided into recyclables, waste and toxics, and separately collected at the apartment and building level. Organic waste is collected and composted on site.

**Treatment Processes** for waste water consists of the following main systems:

1. The waste water is collected in the basement and pumped into a well for the sedimentation of solid particles in the water.
2. The water flows from the well underground into the pond system which is planted with reeds and rushes.
3. The water then flows horizontally through the soil of the ponds, whereby the waste water’s contaminants are broken down by microorganisms which are living in symbiosis with the plant roots.
4. After about 10 days, the water arrives at the clearing pond where it reaches the surface for the first time. The water is stored here until its further use.

The project has been complemented by two intensive research phases in order to better determine the effects of various factors on the functioning of the systems. Seasonal climate changes, the sociology of the residents, biological, economical and technical aspects of the treatment system, and legal issues related to the project were all investigated.

Block 6 demonstrates the potential and possibilities for urban decentralized systems designed to complement centralized systems, while respectfully using and recycling local resources. Block 6’s applied water sparing technologies successfully led to a water consumption rate that is one-third lower than the average in Berlin, which is further reduced to 50% with the use of recycled greywater for toilet flushing.

Considering the costs of providing drinking water and removing waste water, which have doubled since 1983, Block 6 is already an economical alternative. According to city officials, water prices are expected to double again in the next 7 years, providing further economic motivation for the development and support of ecological water systems.

While in the past it was a struggle just to get governmental approval for such local water systems, now it is possible to get support for their development. Since 1990, the city of Berlin has offered financial assistance to developers interested in building water projects and other
ecological systems. This help is channeled through the city’s public housing program.

One of the most striking results is the attractive design of the ponds and community spaces. The various aspects of water are made visible, comprehensible and attractive for the residents. The open spaces are intensively used by people gardening or walking through the community trails, and by kids playing and swimming in the pond during the summer. Whereas the Block 6 project seems advanced, the treatment of waste water in inner-city areas with such a pond system of plants has fallen somewhat out of favor, with more recent data and experiences pointing to even better systems. Many experts believe that systems like Block 6 consume too much land in comparison with other compact or vertical systems.

Block 6 still has a way to go to realize its original design. The water systems are not yet completely in operation; the more difficult than anticipated on-site treatment of sewage remains to be realized.

Yet the project will continue to succeed, because the residents have shown a great deal of interest in supporting it and have personally assumed responsibility for its success. They have organized a neighborhood “Eco-Social Living Association”, which has developed into an advocacy group dedicated to maintaining and furthering the experimental plans of Block 6.

Ekhart Hahn, architect and urban ecologist, directed the interdisciplinary “Working Group for Ecological Urban Restructuring”, responsible for the “Integrated Water Project Block 6” and other neighborhood demonstrations of the principles of social ecology. Hahn is currently the director of Öko-Stadt in Berlin, an association for ecological urban design and research. He’s the author of several books and other publications. The landscaping for Block 6, as well as the photography for this piece, is largely the work of Hans Loidl, also of Berlin.

The edges of the rainwater ponds throughout Block 6, above, have natural slopes, easy and humane gradients that invite people into the water as far as they like. This is very different from a chlorinated, aseptic swimming pool, with its sudden transition from walking at poolside to six feet of water. Below, children, who are in grave danger around concrete swimming pools, are quite safe left alone near slope-edged ponds such as these. Children, even babies, can teach themselves to swim in this environment, since the slope encourages safe exploration of their own limits. The natural slope brings peace and calm to the act of swimming, relieves the worry of adults, and carries people back to a more intimate physical relationship with water.
Bike-Aid and the Overseas Development Network

By Shea Dean

Sure, it looks a little difficult. But the easiest way to really understand this country, and talk deeply with everyday people, may be to bike 3,600 miles across the US. Each summer five groups, with up to twenty cyclists each, stop in towns and cities, sleep in Native American lands, churches and community centers, help neighborhoods, rebuild hospices, sandbag against floods, casually solicit money for grassroots groups, and chat in diners, bowling alleys and with the media. They do all this to raise awareness about issues as apparently diverse as AIDS and Third-World development.

And after a summer like that, Bike-Aid participants can handle just about anything.

Bike-Aid always welcomes new riders. They leave beginning in June from Seattle, Portland, San Francisco, Brownsville, Texas, and Montréal. The Portland group, interestingly, is for women only. Everyone meets in Washington, DC on August 19, where they pedal en masse around the Lincoln Memorial and engage in satisfying post-journey revelry.

Their arrival at the capital is an announcement to the powers that be, by a well-worn and diverse bunch of activists. Several come from developing countries to ride, and discuss, in the most unlikely places along the way, development from a transnational and grassroots perspective. At the DC ceremonies, the speakers emphasize that AIDS, the environment, women, and economics can only be understood if you see what's happening beyond US borders.

To move global issues into a local, personal context, Nazir Ahmad founded the Overseas Development Network (ODN), Bike-Aid's parent organization, at Stanford in 1983. He and his brother, both from Bangladesh, felt that
US students had strange impressions of what was happening in undeveloped countries. "As we are getting into more and more of an interdependent world", says Ahmad, "we wanted to inculcate a sense of responsibility. We thought, since young people are going to inherit the future, we should insert and integrate global concerns on a university level."

They started Bike-Aid in 1986 as outreach for ODN's global philosophy. According to Ahmad, it was intended to bring students together during the summer, tapping the image-making success of early-80s "We are the world" spin-offs like Live-Aid and Hands Across America. But unlike those one-time, band-aid benefits, Bike-Aid has continued to thrive and expand its horizons over the past eight years, while still maintaining its grassroots focus.

In the past two years, instead of trying to address all global issues — a pretty tall order, no matter how idealistic you are — Bike-Aid has focused on AIDS and HIV. Before the ride, cyclists not only study education packets on AIDS and HIV worldwide, but they train in ways to talk about AIDS in different communities, using guerilla theater, fundraising walks, potlucks, video, chit-chat and presentations. Although role-playing sessions, and discussions about humility and keeping cool, certainly help riders to prepare mentally, the learning curve on the road is still very steep.

Jonny Symons, the Young Men's Program Coordinator at the Stop AIDS Project, is helping Bike-Aid figure out strategies to effectively open up discussions about AIDS in different areas and situations. Having done work around AIDS and HIV in Africa, Symons feels Bike-Aid riders must recognize regional differences within the United States, "and that in terms of education, you can't assume that what works in San Francisco works in Missouri." He hopes riders will engage in an "exchange of ideas" with locals, and hopes to see "a real listening process, open to whatever creative solutions local people have to offer."

"We want to complement the work that's already been done", says Mike Spiegel, co-coordinator of Bike-Aid '93, who contacted AIDS organizations across the country for cyclists to hook up with along the way. "We want to educate people about AIDS on a global scale, and one of the ways to do this is to visit communities in this country that have organized themselves." This makes it easier to learn what works in specific communities from their local activists.

On a long trip with a small group, it gradually gets easier to engage total strangers on unusual topics — at the very least, because you're a little tired of your companions, and need to talk with someone new. But also, there simply is a lot of great importance to talk about, such as the terrific projects ODN works on both here and overseas.

The strength of Bike-Aid's US trip lies in the empowerment of individuals and communities to make grassroots change. Spiegel says, "people can best meet their own needs when they have control over their own means." That's why Bike-Aid funds a women's sewing collective in Chile, programs for at-risk youth in Springfield, MA, and AIDS prevention programs from Ghana to Utah, to name just a few. For example, in Zimbabwe, where homosexuality is illegal, ODN helps a gay and lesbian run community health and activity center, which doubles as a soap cooperative.

Since 1986, Bike-Aid has taken in over a million dollars for such programs. The organization handles most of the logistics and initial funding for the ride. The riders must find their own pledges, and collect what money they can along the way.

Empowerment for the riders is important too. Joy Jacobson, also a Bike-Aid '93 co-coordinator, organized an all-women's route leaving from Portland. She says that the women-only status of the route has nothing to do with "male-bashing", but that "we wanted to create a space where women could bond, and feel comfortable discussing issues specific to them."

As women make up the fastest-growing HIV-positive group in the US, and fully 40% of those carrying the virus throughout the world, there shouldn't be a lack of things to talk about on or after the ride. "The women's route and the AIDS theme can only enhance each other", says Jacobson, "because talking about women and AIDS expands into other things, like the neglect of women's health issues in general."
In addition, Jacobson believes that a group of women being self-sufficient makes a strong, high-visibility statement that women are just as capable as men of rising to the physical and political challenges Bike-Aid offers. “In ’92 when I was cycling,” she remembers, “we met so many people who were so surprised we were out there. ‘Pretty girls cycling ‘cross the country — whoa!’ they said. But we said to ourselves: one — we’re not girls, and two — why wouldn’t we?”

Jessica Saalfeld of San Francisco recalls her experience on the Portland route in 1990 as being a challenge in more ways than one. “First there was the introspective type of growth that ranged from exposure to different parts of the US to being able to sustain that much energy every day just to get from one place to the next. And then we had lots of people on our route with strong beliefs who challenged me and definitely helped me to define and articulate my ideas. They forced me to question things. We had lots of discussions about vegetarianism and anarchism.”

For men and women alike, Bike-Aid can be an unforgettable learning experience. You’re raising money for grassroots projects. You’re living collectively, perhaps for the first time. You’re meeting people from all walks of life and talking with them about the world and about AIDS. Last, but not least, you’re actually pedaling your way across the country. “You learn how to interact with people”, according to Spiegel. “You learn that you’re not always right, that there is no one solution.”

Bike-Aid is recruiting riders now for this summer. If you would like more information or an application (which costs five dollars), write Bike-Aid at 333 Valencia Street, Suite 330, San Francisco, CA 94103, or call the office at (415) 431-4480. Applications are accepted on a first-come, first-served basis.

---

**Overseas Development Network Publications**

Postage and handling $1.50 first item + $1.00 each additional item. (CA residents add 8.5% sales tax). Three or more items, take 20% off. Available from Overseas Development Network, Publications Department, 333 Valencia Street, Suite 330, San Francisco, CA 94103, phone: (415) 431-4204.

**The ODN Development Opportunities Catalog**


**A Handbook for Creating Your Own Internship in International Development**

Based on the experience and advice of returned overseas interns, this handbook contains information on how to arrange a successful internship with an international development organization. It includes a workbook to enable you to evaluate your motivations, skills, and learning objectives, as well as practical advice on financing your internship, living overseas, and returning home. 1993 edition. Students/individuals/institutions: $7.95.

**Opportunities in Grassroots Development in California**


**Opportunities in International Development in New England**


**The Peace Corps and More:**

*120 Ways to Work, Study and Travel in the Third World*

Contains over 100 suggested organizations with which you can gain Third World experience while promoting ideals of social justice and sustainable development. Published by Global Exchange. 1993 Edition. Students: $7.00. Individuals: $10.00. Institutions: $15.00.

**Career Opportunities in International Development in Washington, DC**

A resource guide for students and job seekers looking for internships and employment opportunities with DC-based development organizations. Students: $7.00. Individuals: $10.00. Institutions: $15.00.

**Global Development Studies: Towards Curricular Change**

A guide for students and professors interested in starting or enhancing development studies programs, classes, and activities on college campuses. It includes examples of development modules that have been incorporated into existing courses, and...
student activities that focus on development studies. Price: $7.00.

Pros and Cons of the Peace Corps
A compilation of articles written by journalists and former peace corps volunteers, including a reference guide to publications specializing in internship and employment opportunities around the world. This packet is useful for those considering ways to get experience in global development. 1993 Edition. Price: $7.00.

Global Links
ODN’s tri-annual newsletter is a forum for exchanging ideas and opinions regarding grassroots development. Share experiences, gather information on development issues, and keep informed about ODN activities worldwide. One year subscription (three issues and ODN membership). Students: $15.00. Individuals/institutions: $25.00.

The ODN Affiliate Handbook
A comprehensive resource book designed to help students establish an ODN student group, organize educational and fundraising events, and use ODN’s programs and networking resources. This book contains everything you need to know to start an ODN chapter on your campus. Price: $7.00.

The Bike-Aid 1994 Information Packet and Application
This provides information on ODN’s annual summer cross-country cycling trip, which generates awareness and support for community-based solutions to global issues of poverty and injustice. Price: $5.00.

Bridging the Global Gap:
A Handbook to Linking First and Third World Citizens
Contains information on alternative tourism, material and technical aid, partnerships, sister cities, human rights activities and much more. Published by Global Exchange. Price: $11.95.

Education for Action:
Graduate Studies with a Focus on Social Change
A guide to progressive graduate programs and educators in agriculture, anthropology, development studies, history, law, management, public health, sociology, urban planning and women’s studies. Published by Food First. Price: $6.95.

Development Issues in India: A Workshop Journal
A compilation of discussions and ideas addressing the challenges of development in India. The Workshop addressed such issues as: education, population, growth, appropriate technology, women’s issues, public health, the environment and resource management. The workshop and journal are a project of ASHA (an ODN affiliate, dedicated to a literate and educated population in India). Price: $5.00.
Bolivia’s high Andean plateau is home to many small rural Quechua and Aymara communities. Years ago, with the help of friends in the capital of La Paz, these indigenous peoples combined forces into the Kechuaymara Foundation, a successful, self-directed program for sustainable development. Built upon local knowledge and experience, Kechuaymara’s projects are designed to meet the most pressing needs of its villages.

With some support from solidarity groups in the US, such as the student-based Overseas Development Network (ODN) [see preceding story], they have reinforced local culture, strengthened community cooperation, and improved the nutrition and general health of their people. Kechuaymara has charted an independent course for development in the altiplano region of Bolivia.

Independence has been an issue throughout Latin America for centuries. Kechuaymara was inspired by the work of indigenous Bolivians like Toribio Miranda, Manuela Quevedo, Gregorio Titirico, and Andres Jachakollo, who struggled for the rights and liberty of native peoples in Bolivia during the first half of this century.

Kechuaymara, committed to grassroots democracy, is controlled by a general assembly made up of representatives chosen by 39 member communities. Most of the members, who make a huge effort to get to meetings, are engaged daily in subsistence agriculture and animal husbandry. It is no surprise that many of the foundation’s efforts are aimed at improving production. Other programs promote appropriate technology to stabilize the precarious economic position of its members, while conserving natural resources. Since many of the representatives come from village women’s organizations, many Kechuaymara programs target the participation and education of women in villages.

Operating out of an office in La Paz, the small foundation staff ekes out a living with help from indigenous people who've moved to town and earned some money, and from various development programs. They are responsible for implementing the decisions of the membership. They actively link the city with the altiplano. They also connect Kechuaymara to the rest of the international aid community, forging, for example, the alliance with ODN.

In 1983 it was clear to both Kamal and Nazir Ahmad, the founders of ODN, that US universities were failing to educate students about the challenges facing people around the globe. These Bangladeshi brothers, studying at Harvard, Stanford and Amherst, noted that where international development was discussed, few alternatives were presented. They organized ODN to get students involved in overseas grassroots development. Grassroots development emphasizes a participatory process, self-reliance, local knowledge, voluntary contributions by the community, small-scale projects, appropriate technology, sustainability, and community-building. Nazir explains that “this country has influence disproportionate to its knowledge. So what do you do? You try to increase that knowledge.”

At left, the harvest is sifted as part of Kechuaymara’s project for promoting indigenous grains. The project has set up a number of community seed revolving 'funds', which make loans of seed to villages and families. These loans must be paid back in seed, with interest also in seed, at the end of the season.
The network now has chapter groups on over 70 university campuses, sponsoring regional and national conferences, placing student interns with community organizations in 10 countries, sending one hundred cyclists into the heart of America each summer [see preceding story on Bike-Aid], and sponsoring speaking tours by grassroots organizers from overseas. Over the past eleven years, ODN has sponsored over 100 small-scale projects throughout Asia, Latin America and Africa. Building links and exchanges with these communities, ODN has become both an advocate and a sounding board for a grassroots perspective of development. Believing firmly that communities are the only ones qualified to plan their futures, ODN was eager to support the work of Kechuaymara.

Kechuaymara and ODN found each other, and began collaborating in 1986. At the direction of Kechuaymara, ODN garnered support for a “lecheria” (dairy project), a llama-rearing endeavor, and several small scale water projects, including the total refurbishing of a disused, inappropriate old Alliance for Progress-built system. ODN, for its part, used its connection with Kechuaymara to place student interns and bring attention to development fundraising.

In 1990, the two groups collaborated on the Nutrición y Cultivos Andinos (Nutrition and Andean Cultivation) project to improve quinoa yields and reintroduce the cultivation of tarwi for consumption in rural Bolivia. Both of these crops are indigenous to the altiplano region and are very high in protein, but imported crops such as wheat had replaced them. The project included...
cooking workshops on old and new ways of preparing both tarwi and quinoa.

Unlike conventional development efforts, the project was conceived and implemented in a culturally appropriate manner. The demand originated with the beneficiaries, who asked Kechuaymara staff to help them research solutions, and organize them. Thankfully, this was not a scheme designed by some foreign aid worker. Chris Auriemma, a UC Santa Cruz student who worked with Kechuaymara, explained that “the field staff came from the communities and understood the values, humor and problems of the people.” Workshops were conducted in Aymara and Quechua, instead of only in Spanish, with accessible booklets depicting daily life in the communities.

Working with crops indigenous to the region, Kechuaymara avoided many problems plaguing foreign-initiated development projects. Many of these try to introduce new foods into established diets, and are often rejected by the beneficiaries for various reasons, including taste. Preparing the new food can take more time, more firewood, or an entirely different type of stove. Unlike projects supported through the US government’s Alliance for Progress, which introduced wheat and other foods to the region, Kechuaymara did not seek to reorient people’s culture but rather to strengthen it.

For many people throughout the globe, land tenure and the lack of arable land are major factors limiting the implementation of development projects. Even when a group receives outside resources and holds a claim to some private or public land, ownership and use can be challenged and altered by governments and large regional landholders.

Luckily the relatively poor soil quality in the altiplano protected the land from capital-intensive production. The land has remained the source of the people’s subsistence. Since land tenure was secure, the Nutrición y Cultivos Andinos project was able to implement the Community Seed Banks program.

Community seed banks increase the quality of seeds and ensure a “rotating fund” of seeds, available to more and more families. After harvesting enough seed for food and next year’s crop, families return the amount of seed lent to them, plus an “interest” paid in seed. In this way, the project is self-sustaining and expanding.

The concept of community seed banks contrasts with development strategies promoting the use of hybrid seeds. Hybrid seeds may improve crop yields but don’t produce seeds for the next year and thus begin a cycle of dependency. Farmers who no longer produce seeds become dependent on seed companies, the changing price of seed, and costly fertilizers. In addition, the hybrid seeds lack the immunities of local species and therefore require expensive and dangerous pesticides. Subsistence farmers, who are only marginally integrated into the cash economy, do not have the money to make such purchases.

According to the report compiled by Kechuaymara, the decision to incorporate seed banks came from consultations in village women’s centers. Much of Kechuaymara’s work is based upon women’s participation. The Nutrición y Cultivos Andinos project was no exception, especially since women play a central role in agricultural production. The women both recommended and implemented the Seed Banks.

Women do a large part of the agricultural work throughout the world, but traditional development projects largely ignore them. Conventional development projects favor mechanized agriculture, benefiting big farms most often owned by men. Even on small farms, men are almost always the operators of machinery. These development projects have undermined the efforts of women to feed their families by encouraging men to grow export crops for cash. In other cases, common land cultivated by women is privatized into the hands of men.

In contrast, Kechuaymara made no effort to change the pattern of land use, aside from the re-introduction of higher
protein indigenous crops. The women in each community had a strong voice in planning and implementing their village's seed bank.

The Nutrición y Cultivos Andinos project's success represents only part of the ongoing collaboration between the two organizations. In 1990, as part of its Global Objective '90 conference, ODN brought Juan Félix Arias, the primary administrator of Kechuaymara, to the US. This began a series of personal exchanges which resulted in deeper mutual understanding. Face-to-face interaction makes collaboration more real, motivates everyone, and makes sure that the collaboration reflects everyone's interests. Although the exchange of money is very important, personal contact makes the relationship whole, creates well-thought-out collective goals, and reinforces advocacy work. While it involves some culture shock for people from a subsistence culture, the exposure for student hosts gives them a taste of real transnational solidarity.

Since this initial conference, three students have gone to Bolivia and worked with Kechuaymara, and two members of Kechuaymara have come to the United States to participate in Bike-Aid. To ensure these exchanges happen, 20% of the Bike-Aid net goes to fellowships.

Through these visits, Kechuaymara now better understands ODN's work on campuses. They have seen, for example, the chapter at UC Santa Cruz, which introduces students to ideas of grassroots development and Bolivian culture, and organizes concerts and campus-wide fasts in order to fund the Nutrición y Cultivos Andinos project. The Bike-Aid participants from overseas also saw for themselves the challenges community organizations face throughout the United States. They brought their observations of American culture back to Bolivia, and provided their communities with an alternative to the seductive and misleading media image of the United States. ODN interns were able to see first-hand the work of Kechuaymara and share their experiences with fellow students. Kechuaymara has provided them with a concrete example of grassroots development, and demonstrated the power of alternatives to top-down development.

Conventional development has not only failed to address people's needs, but in many cases has also been a destructive force. Gustavo Esteva reminds us that conventional international development has meant starting:

on a road that others know better... to race up a one-way street...Development for the overwhelming majority has always meant the modernization of their poverty... Most peasants are aware that development has undermined their subsistence.

Grassroots development works to strengthen community control and enhance subsistence. Through the ongoing partnership of organizations like ODN and Kechuaymara, a genuine alternative to large-scale development is emerging.

For more information, contact ODN, or Kechuaymara, Casilla - 5239 La Paz, Bolivia.

---

Quinoa, Andean Style

The Kechuaymara Project publishes pamphlets for indigenous peoples on growing and using tarwi and quinoa, two native Bolivian grains. Here are a pair of related traditional quinoa recipes, one for breakfast and one for a drink.

**Quinoa Breakfast**

**Ingredients:**
- 1-1/2 cups of quinoa grain
- 18 cups of water
- 6 cups of diluted milk
- 2 cups of sugar
- a small spoonful of anise
- 6 cinnamon sticks

**Preparation:** In an adequate container, deposit the water with the cinnamon and anise. After 10 minutes of boiling, put in the well-cleaned (rinsed) quinoa grain and slowly stir until it has cooked (burst), then add the sugar and the milk, boiling for 10 more minutes. Take the pot off the fire and let it cool for a few minutes, then serve.

**Quinoa Drink**

**Ingredients:**
- 1-1/2 pound of quinoa
- 3 pounds of sugar
- 60 pitchers of water
- 3 orange skins
- 1 lemon skin
- 1/2 spoon anise
- 1/2 spoon of aromatic spices (clavo de olor)
- 10 cinnamon sticks

**Preparation:** Mix water with the cinnamon, spices, orange and lemon skins. Boil for 1/2 hour. Add washed quinoa and allow to fully cook. Take pot off the fire. When cool, drain liquid into other containers. Add sugar to taste and serve.

---

For more information, contact ODN, or Kechuaymara, Casilla - 5239 La Paz, Bolivia.
The Bike Column

By Danielle Janes

Early in this century, the United Parcel Service and Western Union delivered mail by bicycle. Some places like downtown St. Petersburg, Florida never found reason to give up this efficient mail delivery vehicle (saving about $5,000 per viable bike route annually). Others cities, like Longmont, Colorado with two mail carriers delivering by bike, are just rediscovering the cost savings and charm. One of Longmont’s human-powered mail carriers delivers on a white tricycle painted with red & blue stripes and a US Postal Service emblem. The more experienced British Mail Department/Service recently converted their 35,000 carrier bikes from single-speed to mountain bikes.

Switzerland has also long used bikes for mail delivery, but it must have been the Swiss Military Bicycle Unit, which recently updated their heavy artillery-laden one-speeds to “light” mountain bikes, that inspired the growing numbers of US mountain bike police. I haven’t seen a modern firefighting bicycle, but in Denver, Seattle, Phoenix and Guilford (North Carolina), emergency medical technician teams on bicycles are cutting down response time in areas where ambulances can’t travel to quickly. In Eugene, a friendly parking meter reader is now making the rounds marking and ticketing cars by recumbent (laid-back) tricycle, instead of by electric car. Now, that is one way to make a lot of automobile drivers appreciate tricyclists!

Other city governments are getting into the act of promoting bicycling. Vienna, a city known for its cafés and wide automobile-dominated boulevard (Ringstrasse), is also very suitable for bike riding because of its flat layout. Or so the city government thinks. They recently set up a system of 4,000 for-pay rental bikes all over the city.

And not all news comes from wealthy countries. Last year, a pilot project in the suburbs of Santiago, Chile called “Pedal Against Smog” began. It already includes bikeways, bike parking at three metro stations, an educational program, and may soon include low-interest loans for a workers’ bike-buying program.

Advocacy Handbooks

Cascade Bicycle Club Government Affairs Committee
Bicycle Transportation Policy & Advocacy Handbook was written specifically to help the Cascade Bicycle Club (CBC) volunteers become more effective bicycle advocates. However, it is also useful for other bicycle advocacy groups. The Handbook lays out some of the possible goals and guidelines that should be included in creating your own volunteer handbook. New CBC volunteers who read the handbook understand CBC’s projects more quickly and thoroughly. This guides the volunteers into their area of interest and encourages rapid progress into useful activism work. It works better than if a veteran volunteer had explained all of the club’s projects, goals and procedures. The Handbook gives important advice about using public meetings as an effective media outreach tool: “Speak early. On major hearings this may require coming 30 minutes to an hour before the hearing to sign up. The media usually leaves after 30 minutes of testimony. ...Always state your position in the first sentence, i.e. for or against”. David Mozer in the Velo Monidale ‘92 Proceeding says, “Since GAC began using the Handbook, regular attendance at meetings has increased as has the pool of people volunteering to work on projects and issues.” The Handbook is available from CBC, PO Box 31299, Seattle, WA 98103. Price $5.00 + $1.40 postage.

A History of the Urban Bicycle Movement, by Bicycling Bob Silverman from Kokopelli Notes magazine (issue Winter ’92) is not a handbook, but an article that deserves attention. Bicycling is FUN, and Montreal’s premier bicycle advocacy group (Le Monde a Bicyclette) makes sure bike advocacy is seriously amusing! For bicycle advocates that don’t want to always work through the bureaucracy, there are alternatives: public education French Canadian style!

- Le Monde a Bicyclette took over a main street by placing coins in eleven parking meters and staying in the spaces with their bikes for three hours.
- To bear witness to bike discrimination on the subway, they painted fake bike-subway permits and carried baby carriages, ladders, sleds and skis alongside a bike into the subway. The bike was the only thing stopped. They won a court case and now bikes are allowed on subways except during rush hour.
- They painted bike paths on streets at night or rolled out 40-foot-long carpet/bike lanes on a street where a bike lane battle was being fought.
- They staged die-ins at auto shows.
- They bicycled down streets with car-sized structures
attached to their bikes, to show how much more space cars take up and to keep cars at a proper distance!
You’ve got to order this article! Or get regular inspiration by ordering a subscription! Send $16 (1 yr) or $30 (2 yrs), or for a sample copy send $4 to Kokopelli Notes, PO Box 8186, Asheville, NC 28814, or call (704) 683-4844.

The Bicycle Advocate’s Action Kit
The BFA’s National Bicycle and Pedestrian Advocacy Campaign includes transportation planning, advocacy conferences, awarding grants and technical assistance to state and local advocacy groups and publication of helpful handbooks such as the Action Kit. This Kit contains short sections on effective bicycle groups/programs, resource lists and lots of photos. Some interesting tidbits include:
- Seattle’s Bicycle Program distributes postcards to bike shops that allow bicyclists to ask for spot improvements (filling potholes, striping bike lanes, upgrading drain designs, installing signs and racks). This allows for quick responses to bicycle unfriendly areas and reduces the city’s liability.
- Missoula’s (Montana) Bike Program works with a redevelopment agency to install 30 to 70 new downtown bike racks each year.
- In Spokane, Washington, public utility employees have access to the utility’s bicycles for errands and short trips.
- Dayton, Ohio’s Bike-A-Thon is a very effective fundraiser, raising between $300,000 and $500,000 (half goes to charity, half to local bike projects).
- Also, check the kit’s local bike advocate’s shopping list. To order the kit, contact: The Bicycle Federation of America, 1818 R St., NW, Washington, DC 20009, (202) 332-6986. With $12 billion in federal funds available through ISTEA for bicycle and pedestrian projects, your group might also want to order BFA’s Community-Based Planning Under ISTEA: A Handbook for Citizens & Agencies, 1993. 70 pages. $20.

Bicycle Blueprint: A Plan to Bring Bicycling Into the Mainstream in New York City.
The Bicycle Blueprint is a bicycle advocate’s powerful ally for learning winning strategies from around the world and for discovering successful steps to a sustainable transport system. This well-researched and eminently useful book by the nation’s largest bicycle advocacy group will tantalize you with the possibilities and make you reconsider the sometimes overwhelming task of creating positive transportation changes. If Transportation Alternatives members have the guts to take on New York City’s car addicts and bureaucracies, we smaller city folk can surely handle our own. Besides all the information about stuff outside of NYC, the Bicycle Blueprint has a section of immediate actions that can be taken by the city government, and an Auto-Free New York four-year plan. If you’ve been reading this column regularly, you’ve heard of free bike loaning programs in Copenhagen, Amsterdam, and Stratford-upon-Avon (England), but did you know that the Boulder Downtown Management Commission in Colorado (USA) bought 100 bikes and 50 helmets for residents and tourists to borrow for free (credit card deposit for security) and Burlington, Vermont’s Champlain College gives students bikes for not having a car on campus.
And for groups fighting increases in the number of lanes of highways/streets, the Blueprint tells of TA members’ day in court. The judge “echoed the findings of the international transportation researchers Peter Newmann and Jeffrey Kenworthy that adding space to keep traffic flowing actually produces more emissions than limiting or reassigning that road space. ...In effect, cities that build more roads and parking spaces find that the volume of cars expands to fill the roads.” There is much to learn from this 160-page treasure. Don’t miss this opportunity! To order, send $15 to Transportation Alternatives, 92 St. Marks Place, New York, NY 10009.

LAW’s The Bicycle Advocate’s Handbook
Bicycle advocates have in common a vision of a more bicycle-friendly future, but their strategies are quite diverse. The League of American Wheelmen’s The Bicycle Advocate’s Handbook shows how to run a national organization:
- Organize an effective group using non-antagonistic tools
- Work closely with government agencies involved in transport
- Influence the mainstream media
- Keep volunteers by, among other things, acknowledging their achievements.
The Handbook’s advice pertains especially well to other large, highly structured, financially stable organizations. Available for $14.95 from League of American Wheelmen, 190 W. Ostend St., Suite 120, Baltimore, MD 21230.

American Public Transit Association’s Local Organizing Kit is meant for public transit groups and does not mention bicycle advocacy. But it is well worth reading for a step-by-step guide on how to organize an effective group and to help bicycle organizations learn more about public transit groups. More bicyclists involved with public transit issues will help the American Public Transit Association understand the need for more bicycle facilities on transit and at stations. This 66-page kit is available from APTA, 1201 New York Ave., NW, Washington, DC 20005.
Resources

Valet Bike Parking as Fund-raiser
Guarded bike parking, a requirement for large bus/train stations and shopping centers in Holland, have high labor costs. However, one of Eugene's bicycle groups found valet bike parking last summer at large outdoor music events and festivals was welcomed and much used by area bicyclists. An added benefit, besides the fun of doing it, was the money helped fund further bike projects! Bicyclists deposited their bikes with the attendants (volunteers) and received a claim check. Three hundred portable bike parking stands (donated by Burley Design Cooperative), snow fencing surrounding the area where bicycles were parked, and several enthusiastic volunteers was all that was needed. Plastic clip-on bike kickstands would probably work for standing up the bikes, if there is no one with the skill or money to weld portable stands. They also might be easier to transport to the site compared with metal racks. Call Allan Hesch if you want suggestions for setting up such a service in your city, (503) 342-2366.

University of Washington Bicycle Education
In Seattle, an electrical engineering professor, Bill Moritz, has created an academically-oriented Center for Human Powered Transportation at the University of Washington. A Human Powered Transportation series of courses began in the Spring of 1993. The course's multidisciplinary approach involved engineers, planners, psychologists and other professionals in the completion of a bike facility design project. It included developing survey techniques and promotional programs, analyzing safety information and creating nonmotorized transportation plans for local agencies. The Center hopes to serve as a clearinghouse for information about bicycle transportation, develop comprehensive bike/pedestrian education and safety programs, and create a Human Powered Transportation journal. To send donations or to find out more, write to Prof. William Moritz, Human Powered Transportation, College of Engineering FT-10, University of Washington, Seattle, WA 98195, or call (206) 543-6049.

Music to your ears?
The ever prevalent screeching car engines, thundering lawn mowers and ear-splitting leaf blowers raise one's stress level. Yet noise pollution is rarely addressed as a health hazard in this country. In Holland, on the other hand, the government has set a goal, to be reached by 2016, to reduce noise levels in front of houses by 25% by limiting parking in residential areas and increasing train travel. Another option is to get even with Bicycle Choirs that sing and ride in residential areas and increasing train travel. Another approach involved engineers, planners, psychologists and other professionals in the completion of a bike facility design project. It included developing survey techniques and promotional programs, analyzing safety information and creating nonmotorized transportation plans for local agencies. The Center hopes to serve as a clearinghouse for information about bicycle transportation, develop comprehensive bike/pedestrian education and safety programs, and create a Human Powered Transportation journal. To send donations or to find out more, write to Prof. William Moritz, Human Powered Transportation, College of Engineering FT-10, University of Washington, Seattle, WA 98195, or call (206) 543-6049.

Showers and lockers
San Diego's ride-sharing agency is now loaning out bike lockers for a 3-month trial period, after which users are allowed to buy the lockers. And Arlington, Virginia joins the national trend toward requiring that new developments install showers and lockers.

Legally Blind Bicycling
Eyecycle, started in sunny Santa Monica, California, gives legally blind people a chance to experience the wonderful sensations of bicycling via tandem rides. For info about the twice-monthly summer rides in Santa Monica or to start your own branch, call Claudia Folska at (310) 207-4154, or write to 1714 Armacost Ave., Suite 2, Los Angeles, CA 90025. A similar program started last summer in Eugene on the third Saturday of the summer months. Burley Design Co-op donated two tandems and Counterpoint another. They are always looking for more sighted captains (front) and legally blind stokers (back)! To join in the fun, contact the Eugene Bike Program, (503) 687-5298.

Anti-Gas Guzzler Campaign
The nationwide Gas Guzzler Campaign plans to encourage the retirement of fuel-inefficient automobiles, as well as energy-wasteful driving practices. If you'd like to find out more, write to The Gas Guzzler Campaign, c/o The Advocacy Institute, NW, Suite 600, Washington, DC 20036.

Amidst the chaos of adapting to new national boundaries, the Czech and Slovak Traffic Club is trying to ensure that young republics don't follow the western model of dependence on the automobile. However, since promoting sustainable transportation systems is difficult, they're asking for donations. Besides financial contributions, they need desktop publishing and other transportation planning software. If you'd like to help, contact them at Cesky a Slovensky dopravni Klub, Jakubské nam.7, CS-602 00 Brn (Czech/Slovakia) FAX+42-5-22-428.

Women's Groups
Is your local women's race cycling underfunded? When did you last get a female bike mechanic? Several groups are working to improve women's place in the bicycling world.
The new **Women’s Cycling Coalition** plans to educate cycling companies, help expand women’s race cycling, and teach women’s bike maintenance classes. Members gain access to the newsletter and resource center. Contact WCC, Box 281, Louisville, CO 80027, (303) 666-0500. **Women’s Cycling Network** has much the same focus, offering members seminars, rides and a quarterly newsletter. Write WCN, PO Box 73, Harvard, IL 60033. **Women’s Mountain Biking & Tea Society** is for wild, playful women only. The 8 chapters even have secret handshakes. Write to WomBats, Box 757, Fairfax, CA 94930.

**Publications**

The **London Cyclist** is a great addition to any bicycle advocate’s library. A tidbit from a recent issue includes mention of a Greenpeace study (Earth Resources Research) describing pollution levels inside automobiles stuck in traffic as 18 times higher than outside. Another gem: a California cyclist who was hit by a police car while he was riding naked is suing the policeman who arrested him. And did you know that even Australian cities are striping (painting) bike lanes to a tune of $4 million to fight pollution. A mere pittance of what an average city spends on car facilities, but at least it is an improvement! Send inquiries to London Cyclist, London Cycling Campaign, 3 Stamford Street, London SE1 9NT, England.

**Cool Bicycle Postcards**

Do you like your postcards to reflect your values? **Bikes Not Cars** has many inspiring black & white bike photos on postcards. You can choose postcards of die-in demonstrations by bicyclists, a photo of over 120 bike lockers at an Amsterdam train station, or bike lanes in Copenhagen that are big enough for two bicyclists to ride side-by-side (among others). To order, write Bikes Not Cars, PO Box 433, Station E, Toronto, Ontario, Canada M6H 4E3 or call Anne Hansen (416) 532-4800.

**Bikes on-line**

One way to find out some of the latest bike news is through Bikenet, a computer bulletin board service provided by America Online. For more info, call 1-800-522-6364, ext 6212 (weekdays noon to 11 pm, weekends noon to 9pm, West Coast time) There is also The Bicycle Transportation Network on ECONET. Contact: EcoNet, 18 De Boom St, San Francisco, CA 94107, (415) 442-0220. Canadians with modems might wish to hook up with the Toronto-based “One Less Car” electronic bulletin board by calling (416) 480-0147.

**Bike Registration**

Registering your bike’s serial number with the local police, National Bike Registry or the American Center for Bicycle Registration will greatly increase your chances of getting it back if it gets stolen. To learn more, contact NBR, 1832 Tribute Road, Suite 205, Sacramento, CA 95815 or call 1-800-848-BIKE, or American Center for Bike Registration, 3030 N. 3rd St., Ste.#200, Phoenix, AZ 85012, (602) 241-8547.

**Bikes on Trains**

You can always bring a disassembled bike on a train, but more rail lines are making room for people to carry on fully-assembled bicycles. Newcomers include: **Southern California Rail Authority**, San Fernando Valley, downtown L.A., Irvine, (714) 453-8138 **NJ Transit Corp**, from Newark to Bay Head, (201) 765-5100 **Toronto Lakeshore Trains**, (416) 665-0022 **Berlin’s new S-Bahn train cars** with 5 bike places each.

**Attention Oregonians**

With your support, Portland’s new **Big Bike Central** will have a public workspace, a fleet of workbikes and trailers for sale, a public meeting space and hopes to offer office space to bike clubs and advocacy groups. It is going to become a vivacious, happening place out of which to promote bicycling. If you can, send a donation to PO Box 14192, Portland, Oregon 97214, or call (503) 227-4439.

For those interested in promoting pedestrian rights, the **Willamette Pedestrian Coalition** is seeking new members. To find out more about what they’re up to, write Willamette Pedestrian Coalition, POB 2252, Portland, OR 97208.

Order these **Free Portland Bicycling Pamphlets** to help you join the 43% of Portland commuters that use the bus or light rail downtown:

**Downtown Portland By Bicycle.** Includes tips on how to ride downtown, shows specific bike parking locations, suggests bike routes. Also says, “If you know of somewhere that you think a bike rack is needed, call 823-7083 for more info.”

**If You Ride a Bike, You’re a Big Wheel to Tri-Met.** For info on ordering the $5 Tri-Met and MAX bike permit and finding a bicycling buddy through a computer matching service, call 238-5833.

**Pathways for Pedestrians: Reducing Portland’s Auto Dependency.** Helpful hints for pedestrians and explanation of the Pedestrian program.


**Bad Weather Bicycling Gear**

**Rain Pants.** If you live in the Pacific NW, you’ve put up with your share of soggy clothes while bicycling. Make the investment for more comfortable cycling today and there will be no more weather excuses for jumping in your car. An Oregon co-op makes bright yellow cycling rain gear, including helmet covers. Order them from **Burley Design Cooperative** at (503) 683-1644, 4080 Stewart Road, Dept 1, Eugene, OR 97403 or check your local bike store.
Mountain Bike Snow Chains. Discover traveling in non-slippery style during the snow season by investing in the best mountain bike tire chains around. I don’t usually plug products, but these “Monitor Traction Devices” consist of steel chains made from aircraft cable that easily slip on and work better than studs. You may be basking in the sun now, but put your order in today and beat the rush, and you’ll be thanking yourself this winter. For more information, call Pit Bull Chains at (503) 656-7060.

Ecotourism

The Tokyo Bicycle Culture Center faces the US Embassy in Tokyo. Perhaps the Japanese Center is trying to teach our car-crazed country something about saner transportation. Inside the Center you’ll find a walking tour of bicycle history with some hundred different bikes (including tricycles, compact bikes and commuting bikes), cycle displays, and test rides. They are located at Jitenshakaikan, No. 3 Bldg., 1-9-3 Akasaka, MINATO-ku, Tokyo 107, Japan. Phone (03) 3584-4530. You’ll also want to visit the Nerima Ward’s rental program. Members have access to bicycles at any of the bicycle parking lots in the system.

Auto-Free Ski Towns

For those incurable ski addicts that are planning ahead, check out Zermatt and 29 other Swiss ski tourist cities for an internal combustion engine-free experience. Zermatt even has solar buses in its electric bus fleet. Please send pictures if you see any human-powered ski lifts?!!

Flying Bikes

If you’d like your bike on your next plane trip with you, but are intimidated by the extra charge, consider joining the League of American Wheelmen. For the cost of membership, you are now entitled to receive free bike passes (worth about $45) on TWA, American West, US Air and NW Airlines. For more information, contact the League of American Wheelmen at (800) 288-BIKE, or 190 W. Ostend St, Suite 120, Baltimore, MD 21230. If you fly into Missoula, Montana, you’ll find a bicycle unloading and assembly area with a basic tool kit at the International Airport encouraged by Bikecentennial/Adventure Cycling’s advocacy work. (Their Bike Report is $25/year from: POB 8308, Missoula, MT 59807). They also publish the very useful Cyclist’s Yellow Pages with info for any traveling bicyclist. To make packing and flying with a bike even easier, try out the new Bike Friday that collapses (20 minutes set up/down) into a Samsonite suitcase. Bike Friday reassembles into a beautiful riding bike. Trailer wheels attach to the suitcase that now carries all your other luggage on your first bike ride into Missoula. For more about Bike Friday, write Green Gear Cycling, 4065 W. 11th, Unit 14, Eugene, OR 97402, or call (503) 687-0487.

Rail-Trails generate a significant amount of money for nearby communities, says a recent National Parks Service study — between $130 and $250 per bike trail user annually. Rails-to-Trails Conservancy has concise literature and information about how to create trails, as well as where the existing ones lie. Write to Rails-to-Trails Conservancy, 1400 16th St., NW, Washington, DC 20036.

Conferences

The Pro Bike, Pro Walk 1994 Symposium will be held September 7-9, 1994 at the Portland Marriott in Portland, Oregon. Register before July 15th and it will cost $295, if registration is $350. The cost includes some meals. What great opportunity to network, I’ll see you there! Contact Kit Keller, Symposium Coordinator, W62N799 Sheboygan Road, Cedarburg, WI 53012.

While the Third International Conference For Auto-Free Cities to be held in Mexico City was cancelled in 1993, it appears Amsterdam, Holland will be the 1994 host city.

Corrections: Womyn’s Wheel (bike clothes) has moved to PO Box 2820, Orleans, MA 02653 and the Bicycle Transportation Alliance moved to 477 SW 11th, Portland OR 97205. For more information, call BT at (503) 282-MOVE.

Is there something special you’d like to read about concerning bicycle advocacy? Write to Danielle Janes, The Bike Column, PO Box 30097, Eugene, Ore 97403, USA.
In a laid-back town like Santa Cruz, California, the last thing one expects is a well-organized subculture of insanely hard-working community activists. Many put in 70 hour weeks, using imagination and tenacity to resolve some of the most difficult problems of our time. Then they meet up at earthy coffee houses and snack joints to share stories, laugh, relax, and give each other support. If enough of them meet, even in places of recreation, casual talk soon turns to serious, detailed discussion of pressing local issues, strategic coalitions, and outreach. This seems out of place in a University town where so many people seem to be surfing, dancing and lying in the sun.

Typically, such a town supports innovative community work, but rarely gets around to organizing any. So where do these people come from? In some part, Santa Cruz owes this effective community sector to the skilled and enthusiastic organizers that pour out of a very special department at the City on the Hill, also known as the University of California at Santa Cruz. RAIN contributors Eric Belfort (see story on the Westside Clinic, next issue), Stefano DeZerega (Director of the Overseas Development Network — see his story, page 34, on Bolivia’s Kechuaymara organization), and RAIN contributing editor Jered Lawson, are all graduates of the UCSC Community Studies program. At a young age, Jered has organized successful projects integrating homeless issues and agricultural reform. Unusual as he is, he is typical of the graduates of this program. — GB

Story by Jered Lawson
Illustrations by Paul Ollswang

I like Clinton’s plan to accept two years of community service as payment for college loans. But, how about combining community work with an undergraduate education? After two years of broad-based general studies, participants could enter a program combining the theory and practice of community-level change. Linking field work with formal education could produce skilled, dedicated activists, ready to create a role for themselves in their community.

This is not idealistic speculation. The UC Santa Cruz has run just such a program since 1969. Students enter their first class asking “how can we do something about AIDS, homelessness, ecological degradation, social injustice, inadequate healthcare and other problems of our time?” They explore the theory of community change, then do a six-month field study with organizations that make a difference. Before they graduate with a degree in Community Studies (CS), they return to the University to consolidate their experience, engage in intense discussion with other CS students, and produce an analytical thesis. This reflection-action-reflection leaves graduates confident in their commitment to build healthier communities.

So if it were possible to amend Clinton’s program, we should ask that students spend two years learning how to
transform society, so that the problems can be resolved. While administering the needed band-aids, students could help to find a cure, at that deep community level inaccessible to national government planning.

In the last 24 years, over a thousand students have trained in grassroots work through the CS program. So many students that, says Mike Rotkin, Field Studies Coordinator for the program, “The Santa Cruz non-profit sector might well collapse if it weren’t for CS students and graduates.” The commitment of graduates is so strong because they experience, while still in school, the satisfaction that comes from fulfilling their constructive ideals. As one student, Maria Chua, says, “making a difference in the world has made all the difference in my education.”

The works of John Dewey, Charlotte Bunch, Myles Horton, Paulo Freire, and other well-known educators inspire a CS curriculum based on a fusion of theory and practice. Students work democratically with faculty, and there’s a heavy reliance on dialogue in the classroom. After all, if we want participatory democracy in society, it should also exist in class. Away from the chalkboard, students go into the field to “actively participate in community groups in a way that they define as useful,” says Bill Friedland, founder of the CS Program. Importantly, the program concentrates on what students view as relevant and effective. “We teach out of their experience rather than just laying the material on them. Instead of purely cognitive education, an education which comes from the head, a more potent education combines the cognitive with the visceral, the guts, the heart, the emotions, the affect. If you can touch all of those elements of a person, then the education is more meaningful.”

Addressing real problems in the real world with real people, instead of just reading, writing, or being lectured about them, gives the education, and perhaps the University itself, meaning and purpose. Rotkin adds, “It’s much better than the class where the teacher opens up the yellow notes they have been using for 20 years and tells students whatever their professor told them when they were in college.”

It all begins with a class that demystifies Theory, the one with the looming “T”. Everyone has theories about how things work, or thoughts on why things don’t, and even visions of how things might work better. “You don’t need to be an expert, or have your thoughts institutionalized before you are able to theorize,” says Stefano Dezerega, a recent graduate of the program. “The class validated the theories underlying our actions and beliefs, and provided a structure for us to articulate them.”

Faculty member Mary Beth Pudup says, “we look at the social construction of knowledge and discuss how others, as well as ourselves, view social change.” Students read and discuss theories and ultimately adopt a system of their own. For example, Stefano was interested in problems of international development: top-down, World Bank-style development can destroy the fabric of community life. He studied a number of relevant theories and ultimately aligned with grassroots development, which, according to Stefano, “emphasizes the participatory process, self-reliance, local knowledge, voluntary contributions by the community, small-scale projects, appropriate technology, sustainability and community-building.” [See his report on the Kechuaymara project in Bolivia, this issue]. Giving voice to their theories, having the academic foundation, students can confidently go into the field to see how a theory is
practiced, and judge the results.

With this emphasis on community-level social change, the department supports the notion that no one person can cure our collective problems. Rather, many problems such as homelessness, gang-violence, drug abuse, etc., may stem exactly from such individualistic thinking and the lack of a community life. Says program administrator Sherry Phillips, “we don’t accept the model that our students go out and ride into town with a six-gun and save Tulsa, Oklahoma. The idea here is that we need to learn with groups and group processes.”

Before students embark on their full-time, six-month field placement, they participate in part-time field placement and classroom discussions. Students choose their own projects, either from Mike Rotkin’s growing list of thousands of local non-profit organizations and government programs, or from other contacts. For example, Eric Belfort felt everyone should have access to primary healthcare, regardless of their economic standing, administered by local community members in an atmosphere of care and respect. His principles led him to the Westside Community Health Center, where they practice the theory of community-oriented primary care.

During a time of preparation and part-time field work, students begin to develop the ethnographic skills needed for potent participant-observation. They learn how to take field notes describing daily work experiences, relations, and the functioning of a non-profit organization. “Good field notes” says faculty member Pat Zavella, “provide the vehicle needed for effective and fulfilling reflection.”

What ultimately differentiates CS from other academic pursuits is its six-month long full-time field study. Again, students, with the help of a faculty advisor, choose a placement with a willing community group that reflects their interests. Using basic approaches to field study common to anthropology and sociology, students spend 40 hours a week working in and observing a particular social service agency, governmental or non-profit organization, political party, or neighborhood group. “We have had students work within the system, say inside a welfare department, and we have had students work with organizations battling the welfare department,” says field studies coordinator, Mike Rotkin.

One student, Jennifer Anderson, who worked with a women’s group, a youth group, and community economic development projects in southern India, says “I was tired of being in a classroom, taking on too many issues abstractly, the field study helped me see how the world’s problems can be more manageable, and see that I am able to do something. It has given me a lot more confidence in myself, and made the educational process a lot more fun, a lot more relevant, and generally more powerful.”

While getting involved in organizations at home or abroad seems exciting and fun, it doesn’t always work out the way students plan. Many get frustrated and disillusioned when they realize most change doesn’t occur overnight, or that some activists replicate patterns of injustice. Maria Chua, who worked with an at-risk youth program in the Mission District of San Francisco, says, “a few of the staff seemed to miss the connection between theory and practice of helping at-risk youth. For example, I had organized a field trip for the youth, that involved a lot of planning and preparation. At the last minute, a couple of the staff decided to schedule another activity without conferring with the people affected by their decision. Two months of planning and the excitement of going on the field trip got shot down because they felt their work took precedence. And to cover it up, the Director of Education said they had to cancel the field trip because of lack of supervision, which was completely unfounded. It was just an excuse to get what they wanted. In this respect I was disillusioned and disappointed.”

But Maria also had many positive experiences with the group. She organized and taught a “mini-community studies class” with at-risk youth. “We went through a list of community organizations to see what interested them,” Maria says, “and they came up with such topics as violence against women, substance abuse, immigrant rights, home-
less shelters and homeless youth, as well as job-placement.” They contacted local organizations and invited them to make presentations. “They were really into it. I remember the first meeting when we were doing the phone calls and the youth were sitting there looking at us nervously. In just a couple of months they could do it on their own, calling up groups to help with their organizing work.”

In one class, a staff member asked, “Why isn’t anyone from the Mission employed at the PG&E plant? And why is it that our families are having to pay so much? Let’s go in there and demand that we get trained and have jobs as youth.” From such discussion in class, as well as from the many days and nights getting to know the youth, Maria saw them moving away from urban violence, towards self-determination.

After such an engagement with reality, returning to an institution filled with big books and arm-chair activists can be quite a shock. “I experienced a sort of cultural ‘nausea’ upon my return,” Jennifer Anderson says half-jokingly, “so it was great to enter a class with 35 of us recounting our experiences. It bordered on group therapy. But seriously, learning about all of the great work people were doing has broadened my horizons even more than the actual field experience.” Hearing everyone’s stories also fosters an understanding of the common ground of diverse community work, i.e. how to work together on the big problems.

At this point students write reflective papers, distilling lessons from their field experience. In one of her papers, “The Romantic Crusader Finds Both Feet on the Ground,” Diane Goodman writes, “after both a part-time and a full-time internship at the Drop-in Center for the Santa Cruz AIDS Project, my idealism is now joined with a stronger, fuller sense of what AIDS work is ... All those hours of talking about nothing and anything, finding the coffee and the toilet paper, refilling the condom supply and watching my co-workers begin to get sick have taught me patience in this work. I’ve learned to sit and observe. I’ve learned that often just my bright hello and pouring the cup of coffee goes a long way.

While I still have my romanticized ideals, I have begun to realize that the daily-ness and slow-going small things are part of AIDS work, too.”

Another student, Michael Vining, who interned with the Homeless Garden Project [see Rain, XIV:3], says “the Analysis class formed a network of activists that, come graduation, will not only aid our social change work, but will surely help us find meaningful work.” When asked about his field study experience, Michael responded, “One lesson I have learned from my internship with the Homeless Garden Project is the importance of a community’s ability to care for itself — that not only the basics of food and shelter and clothing are there, but that meaningful and purposeful work must be there, too. While this may seem simple, most people today can’t say they are doing the kind of work, or having the quality of life, that they want.”

Eventually students write a thesis. It’s a time to force yourself to sit still, dig deep, think hard, and ask critical questions: “Is there something in my experience that others could learn from? How could I, or the people I worked with, have been more effective? What was successful about the work?” It’s a time to reflect, and articulate current conclusions for the rest of the world.

“While being somewhat of a grueling task,” Stefano
recounts, "writing a thesis helped me crystallize the most important educational aspects of my studies for both myself and others." After sifting through hundreds of pages of field notes, and thousands of pages of research materials, the result is not only a valuable new resource, but a larger bag of tricks: analytical, research, and writing skills are all very much in demand in this information age.

The consolidation, however, is not limited to a thesis. Those disinclined to write, or who want to explore other forms of presentation, may produce a video, direct a seminar course, or make a community presentation, among other possibilities. One student, Paula Smith, organized and performed a dance piece, and wrote commentary on the challenges of producing art for social change. Still, there is yet another option, the Synthesis Pathway: fusing previously written papers together, adding an introduction and conclusion. Overall, however, most students opt to write a thesis.

The thesis has also been a savior of the program. For the funds to continue flowing to CS, it has to prove its academic legitimacy, and the worthiness, pertinence, and effectiveness of the curriculum. Every five years, CS comes under scrutiny from an external review board, which evaluates the quality of its academic program. "The tangible pile of senior theses," states Rotkin, "many of which are much better than most masters' theses, are compelling evidence that students are not only doing great work in the community, but that they are also doing great work in the classroom."

Come evaluation time, the social responsibility of the program isn’t taken lightly. The UC system has the general mission of (1) research, (2) teaching, and (3) public service. The fulfillment of the latter by CS racks up a number of passing points. CS provides about half of the University’s total public service hours. "We play such an active and visible role as sort of the public relations," says Rotkin, "that the University would like to keep us around. From their point of view, we can be trotted out when necessary as evidence that they are doing something useful for the world."

But even while academic powers nod their heads in approval of the public service, they generally frown on publicized radical activities. The training of organizers who want things shifted, who want to actively redistribute power and resources, makes the program vulnerable. Freidland said, "when some of our students turned up in the early years on Cesar Chavez’s boycott picket-line in front of Safeway, McHenry [the Chancellor at the time] got a letter form Peter McGalin, the head of Safeway [and big-time donor to the University] saying, ‘Why are you giving academic credit to students who picket my store?’" The students explained: "because Safeway supports the exploitation of farm workers, the land, and the consumer." They were affirming the saying of Myles Horton: "the most important education is action; the most important action is the struggle for justice."

Overall, however, Community Studies has survived the last 24 years because its faculty and administrators are shining examples of the responsible academic. Rotkin states, "the fact that our faculty are interdisciplinary, that they don’t think there is one discipline that answers all of the questions we have about the world — ‘what’s wrong? How can it be fixed? What kinds of social change models make sense? Where is the best placement for students to be asserting energy into the real world to make a difference? Etc.’ — means that they are an interesting group of people." Faculty research includes the study of ethnic communities around the world, political economy, labor, mental health, and organizing. Each of the faculty has practiced what they preach, having done extensive community work. The Administrative Assistant, and backbone of the program, Sherry Phillips, says, "the crux is in the commitment to education for social change. All of our faculty are really committed. Styles may differ, but the integrity of instruction remains constant."

Like all social endeavors, conflicts arise. Struggles between faculty about promotion, course load, and Publish-or-Perish pressures, can temporarily detract from the central goal of teaching undergraduates. And sometimes faculty and students butt heads, usually over curriculum or, in one
case, student representation on the Board. Friedland recounts, "we said you can have as many students on the Board as you like, as long as it is not eight [the number of faculty on the board]. If you want to have nine, ten, great, but not eight, because we do not want to be in an adversarial relationship." Any student can be a member of the Board if they attend the meetings regularly. If they miss two or three meetings they are out. This dynamic quality is encouraged. It keeps everybody from getting too comfortable. And it motivates the faculty to evaluate the effectiveness of the program in the same way they ask the students to evaluate the effectiveness of community groups.

Above all, both the faculty and students hold each other in high regard. Michael Vining says "the faculty are like gold. Rotkin is an incredible resource for students." And Rotkin says, "I find that the students are much more self-directed than other students. Interested in social change, they think for themselves, and are more willing to challenge teachers. So in that sense they are great to work with." The students develop close relations with the faculty, as well as with each other.

In the course of the two-year program a certain camaraderie develops. The networking and cooperation creates a sub-community of new organizers serving Santa Cruz. Michael at the Homeless Garden Project calls up Diane at the Drop-in center and arranges HIV testing for homeless trainees, and Diane calls up Eric at the Westside Community Health Center to discuss funding opportunities for AIDS education, and Eric sets up a tobacco cessation workshop at the Homeless Garden Project. The program naturally encourages the mutual support necessary to keep a community activist effective.

Ultimately it's the steps on the two-year pathway that make a good activist. Laying the theoretical foundations, developing skills for field study, going into the field, analyzing the experience, and consolidating the experience in a final project: these all lead students toward a life of service. It's not, "I'll spend two years making the world a better place, to spend the rest of my life contributing to its demise", but rather "what can I learn in these two years that can help us all work together towards making our community life more fair, meaningful and sustainable."

Where do students end up? Many return to the group they did field study with, many go on to graduate school, and others end up doing work related to their field study. Because of the mutual support developed in school, and the recognition of problems of activist isolation and overwork, few totally burn-out on activism. The CS Board is currently surveying students to track where they've gone, and what beliefs and attitudes they hold. [There will be an updated report in the next issue of RAIN].

Looking through some of the returned surveys is very encouraging. David Harris, a 1984 graduate, now a Community Development Specialist for the city of Chula Vista, recounts his field study placement as being influential in postgraduate employment, "my internship with the Monterey County Pesticide Coalition provided me with experience to get a job with the Environmental Health Coalition. And the core courses and internship were structured so as to provide a solid theoretical foundation and understanding for such work." David is currently working to establish a 12-unit transitional housing program for homeless families, and a 15 to 20 unit emergency shelter. Susan Hutchinson, another '84 graduate, wrote that her "internship with the Center for Third World Organizing led to employment there, and that led to my current job with the Association of Community Organizations for Reform Now, better known as ACORN. I probably would not have had such an easy time if it wasn't for the contacts made with Community Studies." What is important to remember is that regardless of where graduates end up, they maintain the ability to ask the questions, "How is this work bettering society, and how can I work more effectively?"

Imagine if everyone asked such questions.

In the end, Friedland states, "more CS students remain dedicated to finding ways to change our troubled world than students who don't go through our program. These are
students who have enough of a positive experience to say that it’s worthwhile to continue doing it.”

The program itself is a model project. It bridges the gap that usually exists between institutions of higher learning and local communities. It’s a pro-active, liberating education instead a reactive one. Students don’t simply conform to the status quo, and aren’t schooled to obey the boss in boring, moronic, monotonous jobs. They instead become the cooperating instigators of a better future.

When it seems there’s never enough community organizers, it’s encouraging to know that this program consistently nurtures practicing idealists. Every institution of higher learning should similarly uphold their responsibility to local communities, and to students looking for meaningful work. Starting such a program today, though, must almost be a political act, since Universities are financially pinched; the CS program began in 1969 amidst heady, experimental days on the young, well-funded Santa Cruz campus. While money for a new program may be a major obstacle, describing the pathway is relatively easy, due to the established curriculum. According to Friedland, “All you would have to do is spend a week here and you can learn enough to start a program.” It helps to be connected to the political life of the institution, and to run in academic circles. Such a program could even be organized outside of established institutions. With the will and determination to make a difference, there is a way to make it happen. In fact, that’s just what the program teaches.

The program coordinators can be contacted at: Community Studies, UC Santa Cruz, Santa Cruz, CA 95064. Phone: (408) 459-2371. Alumnus Jered Lawson cannot be reached by telephone since he lives in a new yurt in the UC campus Farm & Garden center, teaching students to organize organic community supported farming cooperatives. For more specific information on the Community Studies program, see the next two pages.
UCSC's Community Studies Program — Some Detail

These are difficult times at most Universities, so the idea of introducing a new program might not meet with much enthusiasm. But if the institution owes anything to the surrounding community, and most do, then a Community Studies program would help to pay that debt. Alternatively, such a program could be introduced at a Community College, High School or private institution.

For those who are interested, here is a sample of Community Studies curricular materials from the UCSC people.

Pathways Through the Major

Philosophy

The Community Studies Board, founded in 1969, emphasizes the educational value of learning through the experience and study of social change. The overall goal is to create an atmosphere that supports and encourages students to learn through direct application of their education to everyday issues and concerns. A distinguishing feature of the program is the six-month, full-time field placement in an organization of the student's choosing, an arrangement facilitated by the Board's Field Studies Coordinator. Since 1976, approximately one-third of Community Studies majors have done their field study in other parts of the world, another third elsewhere in California, and the rest in the local Santa Cruz area.

Acceptance and the Board

To be accepted as majors, students 1) attend an orientation before either Fall or Winter quarters, 2) prepare a draft of their Declaration of Major petition, 3) complete an application and a one-paragraph statement of interest, 4) meet with the academic preceptor to cover general requirements, and 5) participate in a brief interview with both a faculty member and a Community Studies senior. During this interview the draft plan will be reviewed, reworked as necessary, and transferred onto the petition. The student signs this and turns it over to the Community Studies Board for final approval. At the board's discretion, students may be directed to another board of study on campus if their needs do not correspond with the orientation and goals of the program.

Once accepted as a major, students may become members of the Board, participating in regular Board meetings and making recommendations about curriculum and related matters.

Courses

Initially, all students in the major take the same courses. Students may then complete major requirements on one of two different pathways: the Senior Synthesis or the Senior Thesis. The following courses are required for all students in the major, in the following sequence:

**Theory and Practice**
(CMMU 100, 5 units)

**Preparation for Field Studies**
(CMMU 102 A/B, 10 units)

**Independent Field Study**
(CMMU 198, 30 units)

**Analysis of Field Materials**
(CMMU 194, 5 units)

During the final course, students are directed onto the pathways:

1) Senior Synthesis
Students complete a senior essay introducing and synthesizing two or more already completed papers. These papers may come from any upper-division UCSC course, including Analysis of Field Materials, and must in some way represent a response to the six-month field study. Students in the synthesis pathway must complete three upper-division electives, two of which must be taken from the Community Studies Board or course requirements for a minor or double major in another discipline.

2) Senior Thesis
Students take CMMU 195A, Senior Thesis Seminar (5 units) after completing Analysis of Field Materials. They may take two extra quarters of Senior Thesis if needed. The purpose of Senior Thesis is to reconstruct and analyze the field experience and to communicate, in some substantial way, this experience to others. The format can vary considerably: a literary work, a video or radio documentary, the teaching of a seminar, an extended piece of social analysis, a funding proposal for a community organization, etc. The student is expected to make an oral presentation of the thesis before a group of faculty and community members.

Facilities

The Community Studies Board maintains several unique resources for students. A media laboratory is available for majors (and others in the social sciences) to learn the use of radio, video, film and graphic media as research and presentation tools. A field placement coordinator works with each student to develop their part and full-time field study. The Board also maintains a complete collection of its Senior Theses, now numbering over 600; a subject/keyword computer retrieval system makes these materials fully accessible.

Lower-Division Courses

**Social documentation**
Examines works from various media recognizably drawn from "real life". Through film, photography, oral history and other disciplines, students develop critical understanding of social documentation. Students create documentaries in production collectives.

**Student-Directed Seminar**
Seminars taught by upper-division or graduate students under faculty supervision.
Chicanos and Social Change
Introduction to studying Chico political experience with selected US institutions, e.g. education and health, beginning with an historical overview and ending with consideration of Chicanos' political future. Weekly guest speakers.

Civil Rights Movement: Grassroots Change and American Society
The civil rights movement of the 1950s-1960s was one of the most important grassroots social movements in American history. This course examines the movement, focusing especially on the experience of rank-and-file participants, and on the ultimate social effects.

California: Edge of America
Is California the “leading” or “outer” edge of this country? Examines the state's population growth and ethnic diversity as they relate to different phases of economic development. Explores California’s myths and cultural mystique, especially as these define the state’s relationship with the rest of the world.

Mass Media and Community Alternatives
An introduction to media and its relationship to community culture, ideology, and popular consciousness. Examines the history and structure of mass media and media alternatives for social change. Students produce original media projects for print radio, television or cinema.

Introduction to the AIDS epidemic
The history and politics of AIDS, with special attention paid to the impact of race, gender and sexuality on epidemiology, prevention, treatment, care and research priorities.

Field Study
Supervised research for lower-division students, conducted off-campus within regular commuting distance. Petitions may be obtained at Community Studies Office. Prerequisites: approval of student's advisor, certification of adequate preparation, approval of Board.

Tutorial
Individual, directed study for lower-division undergraduates. Petitions may be obtained at Community Studies Office. Prerequisites: approval of student’s advisor, certification of adequate preparation, approval of Board.

Upper-Division Courses

Theory and Practice
Introduces students to different ways of perceiving and understanding the world, engaging them in an ongoing dialogue about the practical implications of theory and the theoretical implications of practice. Faculty introduce and discuss their own work in these terms. This course must be completed prior to the six-month field study.

Preparation for Field Studies
Part-time field work, along with discussions on participant observer field methods. Must be completed prior to six-month field study.

Workers and Community in Industrializing America
An examination of working-class life as it took form during America’s industrial revolution. Topics include the transformation of work, mass immigration, patterns of community, and political roles played by working people in the emergence of industrial America.

The Political Economy of US Agriculture
An historical and institutional examination of modern US agriculture, including the destruction of rural society, the institutions that facilitate the transition to large-scale agribusiness, and selected social systems involved in agricultural production.

Communities through Imagination
The use of fantasy and expression in describing communities. How writers and other artists develop a sense of daily life and render the individual’s relation with the larger world. Reading in fiction and non-fiction, with coursework in writing.

US Regions and the Global Economy
Insights from geography, economics, planning, and other disciplines are brought to bear on how and why regions in the US have followed different paths of economic development. The principle theme is that difference and change must be understood in terms of the interaction of processes at many scales.

Method of Teaching Community
Each student serves as a facilitator for small discussion groups in connection with core community studies courses. Facilitators complete course readings and meet with instructor as a group to discuss the teaching process.

A small sample of the texts used in the core courses:

Peggy Golde

Jeffrey Galper

Ram Dass and Paul Gorman

Ayala Pines and Elliot Aronson

Howard Becker

Barney Glaser and Anselm Strauss

Michael Burawoy

Linda Niemann

Howard Becker
This educational and fun environmental audit guide helps readers analyze the environmental impact of their household energy and water use, transportation, consumerism, toxics, waste/recycling, environmental advocacy, respect of the land, livelihood and family planning. Strategies for reducing your environmental impact are integrated with the "audit" questions. Not all of the questions give you sufficient answer choices, but you get a general sense of which habits you need to rethink to be environmentally conscious. It was heartening to learn that a passenger on a full airplane uses nearly the same amount of fuel as a car driver (27 miles per gallon). But EarthScore also reminds us to ask airlines if they are using fuel-efficient and low NOx emissions (NOx destroys the ozone layer). Those who survive the audit’s tough scoring system and reach the exalted rarik of eco-hero are to be congratulated!


Practical Home Energy Savings is filled with valuable information for reducing your utility bills. The conservation suggestions have mostly a five year payback. These quick turn-around measures may encourage all but the temporary renter to make energy efficiency investments for a more comfortable and safe home. For instance, it’s best to buy electronically ballasted integral compact fluorescent lamps because other fluorescents contain radioactive elements. But they should still be disposed of as toxic waste because of their toxic mercury content. As one incentive for action, the book points out that if the US were as efficient as Western Europe or Japan, we’d wipe out the federal deficit.


If you are planning to buy any new household appliances, check this Guide. It has listings of super energy-efficient products, and some straightforward, simple techniques for reducing your utility bills. It’s a great reference resource with useful visual aids like insulated window shades that reduce heating bills in the winter and cooling bills in the summer. (See shades above)


You’ll save time searching for the best books on energy efficiency by perusing this Sourcebook’s reviews first. The Rocky Mountain Institute has a well-established reputation for excellent energy efficiency work. So look here first for good references and sources in any of the following topics: house design, construction and retrofit; energy-efficient appliances; owner-builder design and construction; renewable energy sources; energy-efficient house plans; financing energy efficiency; resource-efficient landscaping and site design; household environmental quality; safe and efficient water use and waste disposal. Since mobile homes consist of 5-10% of single-family housing in the US, there is even a review of Your Mobile Home Energy and Repair Guide.


With lumber prices skyrocketing and concern for forest ecosystems increasing, houses made mostly out of dried straw bales make sense. This is not a joke, but an effective building material. Neither the big, bad wolf from our childhood fairytales nor a ferocious wind can blow plastered straw bale
houses down. Some straw houses have survived since the early 1900s. To build one doesn’t require skilled construction workers, just 6-7 volunteers a day. Benefits of plastered straw bale construction include less transport, low cost ($10/sq. foot), high insulation values (R-values of 26-160), superior noise protection, less labor costs and actually more fire resistance than conventional building materials. Currently, this valuable housing material is mostly wasted every year after harvest because people are not aware of its advantages. If you decide to look into this option, make sure you don’t use hay since it doesn’t work. This video shows how to build a straw bale home on a concrete foundation with a traditional roof. Drawings of necessary tools and a wall plan are included. Unfortunately, the video doesn’t show the plastered house, only the straw bale structure. So for more reading, check out Plastered Straw Bale Construction: Super Efficient and Economical Buildings, by Bainbridge & Steen. Available for $10 from The Canelo Project, HCR Box 324, Canelo, AZ 85611. Also A Straw Bale Primer, by MacDonald, $10 from S.O. MacDonald, PO Box 58, Gila, NM 88038.


Visions of the 21st Century is filled with wild and entertaining drawings of both serious and playful inventions. While many of the ideas are overly high-tech, there are some low-tech ones that make sense, and overall, the book is useful for sparking the imagination! My favorite vision is the Pedal Train, (left), though a normal bicycle is wonderfully visionary and improvements to bicycling infrastructure (bike lanes, bike parking, showers, etc.) would hopefully take precedence in the normal world. Other visions include a portable gym locker with shower, a briefskate (skateboard that is also a briefcase), the Green community, protected public sleeping areas and public accommodators (toilets and phones by bus stops).


Toward Sustainable Communities is about real, functioning projects and initiatives for an environmentally-healthy future. These visionary yet practical models will enlighten and guide city policymakers and citizens alike. For promoting sustainable transportation, Roseland describes the successes of on-street preferential parking programs for car-pools, and the free or inexpensive transit fares in Portland and Seattle. Hotels in Hamburg and Frankfurt, Germany, decrease the negative impact of tourism by giving free transit passes to guests. Toronto improves female bus ridership by having buses stop anywhere along their routes after dark so women have shorter and safer distances to walk. We learn that giving up a second car and using public transportation breaks a $3,000/year habit and saves between $150 and $250/month. One Maryland county makes this clear by providing mortgage insurance at increased borrowing power levels for single car households.

Some practical land use initiatives Roseland uncovered include a Melbourne study showing it’s cheaper for cities to pay developers to build near downtown cores than to pay the infrastructural costs of sprawl. Portland, Oregon understood the advantages of high density, nodal planning strategy that emphasized energy conservation. Now 43% of commuters to downtown use the bus and light rail. One way to encourage diverse density is to try a program similar to Kingston, Ontario’s low-interest loan program for converting vacant commercial space to residential.

Other cities are saving energy and money lost to the heat island effect of black asphalt (about $2.6 billion lost in US) by mixing asphalt with light-colored sand. Or like Sacramento, an electric company can offer energy efficiency home conversions that are amortized over 15 years, so your electric and water bills are lower than before the conversion.

Recycling is one way to reduce urban landfill space problems, but reuse is the approach that treads even more lightly on energy resources and landfill space. Minneapolis requires food eaten on restaurant premises to be served in reusable containers, and this has had a tremendous positive impact. One German town even has a dishmobile which is equipped with 600 plates, silverware and equipment for washing dishes at public festivals and private events. Also, some German natural food stores refuse to sell packaged goods, so customers must bring their own containers; they save tons of space in the landfill that would be taken up by non-biodegradable food containers. Garnering information from these successful programs will make similar changes in your own community easier.
Agriculture
agAccess
603 Fourth Street
Davis, CA 95616

The agAccess Catalog is a good source for agricultural and horticultural books and videos, and is produced by people who helped start California Certified Organic Farmers, the Farallones Institute, and still run the Center for Sustainable Agriculture. The agAccess Research Information Service helps farmers find specialized information on market and business development, new crop production techniques, equipment and software, technical expertise, databases and mailing lists. Researchers have wide experience with large and small scale, fruit, organic, intermediate, etc. To order the catalog or to find out more, call (916) 756-7177 or Fax 756-7188.

The Harvest Times
PO Box 27
Mt. Tremper, NY 12457

This newsletter is an overview report of various community supported agriculture programs around North America. The Harvest Times contains articles about how to get more CSA share members, how to work the kinks out of community gardens and a hearty section of letters to the editor. These letters network community supported farms with one another. They also provide listings of job and apprenticeship openings. Send $10 for a one-year subscription (four issues) or $15 for a foreign subscription.

Appropriate Technology
Solar Energy Association of Oregon
027 SW Arthur Street
Portland, Oregon 97201
(503) 224-7867

Solar Energy Association of Oregon is a networking service for Northwest solar enthusiasts. The Energizer, their bi-monthly publication, includes an events calendar, a brief question and answer column about various events, and reviews of past conferences for people who were unable to attend. For info about Solar '94 conference, June 25-30 in San Jose, California, contact the American Solar Energy Association at 2400 Central Ave., G-1, Boulder, CO 80301.

Sustainable Technologies International
PO Box 1115
Carbondale, CO 81632-1115
(303) 963-0715

Do you learn better in a hands-on situation? Are you interested in learning more about how renewable energy sources are used? Sustainable Technologies International is a participatory program for people interested in hydro, wind and solar energy systems. Students will install various types of systems and explore existing systems from other classes. The instructors are award-winning in the renewable energy field with many years of teaching experience. The workshop prices ranges from $400-$3,200. Write for a more detailed brochure and a complete price listing.

Institute for Independent Living
Real Goods
966 Mazzoni Street
Ukiah, CA 95482

Learn about sustainable living from hands-on practice in designing renewable energy systems (solar, wind and hydroelectric) from Real Goods Institute for Independent Living. Only 2 1/2 hours north of San Francisco, Real Goods' summer workshops offer each participant the opportunity to discover how to assemble a remote home power kit, visit off-the-grid homesites, find out more about shelter alternatives (domes, yurts, earth-beamed), learn organic gardening and how to buy land. The weekend workshops with lodging and delicious vegetarian meals are $325. Contact Debbie Robertson at (707) 468-9292.

Children
Green Teacher
95 Robert Street
Toronto, Ontario M5S 2K5
Canada

Teaching environmental values to children is a welcomed friend. A magazine dedicated to supporting environmental teachers, like Green Teacher, is a welcomed friend. Published every two months during the school year (5 times/year), GT keeps teachers up to date about the latest teaching resources and environmental education conferences. A recent issue focused on teaching peacemaking and had activities for teachers to use in the classroom. Subscriptions for US residents are US$27.

EARTH, AIR, and SKY
Firefly Books Ltd.
PO Box 1338, Ellicott Station
Buffalo, NY 14205

Has your child ever asked you why the sky is blue or what clouds are made of? EARTH, AIR and SKY are three short books with the answers to a child's questions. They are geared toward elementary-school-aged environmentalists-to-be. Each story scientifically explains nature with bright illustrations, fun games and simple text. These books teach children to appreciate the geological phenomena of our universe. This series, written by David Allen, can be purchased for $3.95 per book at your local bookstore or write for a complete listing of their children's books.
Detroit Summer
4605 Cass Avenue
Detroit, MI 48202

Detroit Summer Update. Youth volunteers (locals from 14-25 years old and out-of-towners from 18-25 years) revitalize parts of Detroit each summer. While working with local community people, volunteers rehabilitate houses, turn vacant lots into parks and baseball diamonds, research river pollution, paint murals, and march against violence and crack houses. Housing and food is provided. To get involved call (313) 832-2904.

Solar Box Cookers Northwest
7036 18th Avenue NE
Seattle, WA 98115

Solar Box Cookers Northwest is a nonprofit organization dedicated to encouraging solar use through ovens. The solar box cookers are easy to build and use. They are made with many different things like recycled wood, cardboard, glass and plastic. Making the ovens can be a beneficial environmental project for students of all ages. Also, solar ovens can be made anywhere in the world because they require minimal supplies. They can be used to cook food and sterilize water. Solar box cookers can teach students about the benefits of using renewable sources of energy, and they raise awareness about what resources are available in other areas of the world. Write them for more information.

Cultural Survival
Cultural Conservancy
PO Box 5124
Mill Valley, CA 94942

The Cultural Conservancy is dedicated to legally protecting native lands and cultures throughout North America. The organization has formed a number of land trusts, one successful example being Hui ‘Aina o Huna in Hawaii. These land trusts are private, nonprofit, tax-exempt organizations that preserve the land’s natural resources and protect the original inhabitants of the area. To join the Cultural Conservancy send $25-$100 for an annual membership fee or if interested in volunteering, write to the above address. Legal services are also available through the Cultural Conservancy, at the Law Office of Patricia J. Cummings, 2000 Bayhills Drive, San Rafael, CA 94903.

Environmental Action
The Ecology Center
2530 San Pablo Avenue
Berkeley, CA 94702

The Ecology Center has been an active environmental organization in the Bay Area since 1969. They sponsor two farmers markets, have a library and provide recycling services for Berkeley. Their quarterly publication, Terrain, includes a regular synopsis of environmental news from around the world, such as Bangladesh’s banning of plastic shopping bag manufacturing; UC Berkeley’s new electric buses; or a new California hotline for reporting polluting cars at 1-800-EXHAUST. Terrain also has insightful features on forestry practices or the pollution costs of bicycle production. To join the Ecology Center, send a $25-$250 pledge which will be applied toward your property and your health. Home Environmental Info Services offers a complete report of government-identified hazards in residential areas. These could be anything from factory production to buried landfills. Send $75 to receive an ERII Scan or call the above toll-free number listed.

Forest Affairs
Headwaters
PO Box 729
Ashland, OR 97520

Headwaters is an Oregon group dedicated to protecting watersheds from logging. The group has been actively monitoring and restoring forest ecosystems since 1974. The Headwaters’ quarterly publication reports on threatened areas and explores alternative forms of logging.
such as using horses. Headwaters’ goal is to raise awareness of forest damage as logging continues. To become a member and receive their update, send $20, or if on a limited budget, $10.

Oregon Natural Resources Council
522 SW 5th Ave., Suite 1050
Portland, OR 97204

The ONRC is another Oregon-based group that focuses much of their energy on forest issues. Wild Oregon, their quarterly journal, contains articles about the Oregon dunes, alternative natural resources for Oregon and a look at the politics surrounding timber industry resources. To become a member of ONRC, send $25 for a single membership or $29 for a family membership.

Western Ancient Forest Campaign
1400 16th Street, NW
Washington, DC 20036

Western Ancient Forest Campaign is a lobbying effort to prevent clearcuts of old growth stands. This group started a massive letter-writing campaign to counter the timber industry’s lobbying efforts. If you want to get involved in forest politics, this group is definitely direct action. WAFC was founded on May 29, 1993 when participants of the Forest Reform Network created a strategic plan outlining what their demands were. One of the elements in the plan was to encourage other organizations to participate in letter writing campaigns to Clinton and his advisors. WAFC needs support with their endeavor.

Communities Magazine
Route 1, Box 155-M
Rutledge, MO 63563
(816) 883-5543

Come together with Communities Magazine. This quarterly journal is a complete networking magazine for intentional communities of all sorts. There are articles about current, past and planned communities, as well as community management, communication and networking. A recent publication, #81/82, discussed the ending of one intentional community through two former members’ perspectives. Also, Communities Magazine has articles about various plans for keeping balanced leadership, and the evolution of new communities. This thorough guide also provides listings of workshops, a directory of communities worldwide and a classified section. For a subscription to Communities Magazine, individuals send $18 for four issues, $33 for eight issues. Communities send $22 for four issues, $40 for eight.

Northwest Sustainable Communities Association
22020 East Lost Lake Road
Snohomish, WA 98290

Are you looking for guidance in your community? NW Sustainable Communities Association meets monthly and sponsors a number of workshops concerning cohousing projects, cooperatives and intentional communities. Its goal is to create a network of support for continued successful communal living. Members receive a quarterly newsletter with upcoming events and brief introductions into community problems and solutions. To become a member, send $5 for annual membership fees. To find out about the monthly meetings, contact Fred Lanphaer at (206) 486-2035.

International Grassroots
International Institute of Rural Reconstruction
475 Riverside Drive, Room 1270
New York, NY 10115

IIRR is a training center in the Philippines that focuses on rural reconstruction in underdeveloped countries. Their quarterly newsletter, the IIRR Report, shows positive examples of people who after being trained at the IIRR have used their skills to help build communities. The IIRR is a good resource for people interested in learning about aiding rural areas in Third World countries.

Rainforest Action Network
450 Sansome, Suite 700
San Francisco, CA 94111

The rainforests are crucial to the environment because they are the richest and most diverse living systems on our planet. They need to be protected as big businesses rapidly devour them for commercial purposes. Rainforest Action Network is a nonprofit organization that is linked internationally to other similar...
organizations that protect rainforests. RAN’s quarterly publication, World Rainforest Report, describes the kinds of successful protective actions being taken. They also warn members about future rainforest threats. To organize a group for your area, or for more info, call Alex at (415) 398-4404.

Volunteers For Peace, Inc.
43 Tiffany Road
Belmont, VT 05730
(802) 259-2759

Volunteers For Peace promotes international workshops in 40 countries around the world. This program offers an inexpensive way to travel and learn at the same time. The programs cost from $125-$1600. This year, VFP will have workcamps in Russia, Cuba, Guatemala, and many other locations. For a more complete listing of VFP locations, send $10. This is tax-deductible and is applied toward any future registration costs.

Mental Health Alternatives
Clearinghouse on Human Rights and Psychiatry
PO Box 11284
Eugene, OR 97440-3484
(503) 341-0100

Forced medication and electroshock therapy are legal forms of treatment for mental health patients in many states; however, there are alternatives to these treatments. Clearinghouse on Human Rights and Psychiatry is an organization of current and former patients dedicated to informing others about their alternatives. They are part of a larger organization called Support Coalition International which provides support for smaller groups through nationwide lobbying and information services. The smaller groups, CHRP being one, use the resources provided by the coalition to lobby locally, provide support groups and publish newsletters. The CHRP’s publication, Dendron, advocates healing through the use of natural therapies like Reiki, Hakomi, and Chinese herbs. They hold frequent support groups and have a 24-hour voice-mail service. If you have any ideas to share with CHRP or if you wish to begin such a group, write or call for further information.

Urban Renewal
GroundWork
PO 14141
San Francisco, CA 94114
(415) 255-7623

GroundWork is a grassroots, non-profit publication dedicated to national and international urban renewal. The publication was formerly called Green Letter, however, due to financial difficulties, it was revamped. A recent issue explores the growing concerns about nuclear waste in Russia. The reporter thoroughly researched this topic from within Russia. Other articles range from the Gay Pride March on Washington to Pro-choice rallies in Milwaukee. All of GroundWork’s sixty pages are devoted to acknowledging positive programs and important issues that concern all Americans as a part of a national community. This magazine is also a networking publication, providing contact addresses with every article for further information. GroundWork, like all other grassroots organizations, depends on reader support. If you are interested in subscribing, there is a sliding scale from $20-$100. Everything helps, so send what is financially feasible. It is also possible to buy bulk issues at $1 each and resell them for $2 to financially benefit your organization.

Simple Living
1802 North 54th Street
Seattle, WA 98103

Have you ever thought about modifying your life? Where would you start? Simple Living is a newsletter for those choosing voluntary simplicity as a way to approach their lives. The publication features articles about people who have made their lives simpler by growing their own food, sewing their own clothes and giving up many things that are commonly viewed as necessities. This $10-per-year newsletter explores issues such as raising children, organic gardening, and how one can create a better world through being conscious of personal contributions to the chaos of this crowded planet. Simple Living also has a barter bank. To join the barter bank send $5 and a description of what services you are offering or what you are looking for. For further information about this, write to Dave Barden, 6302 Corliss Avenue, North, Seattle, WA 98103, or call (203) 527-9216.

Corrections: Last issue we forgot to give you the address of the Narmada dam resisters in India who vowed to remain and risk drowning in the villages that are in the path of proposed dam flooding. To help, write to Baba Amte/Maharogi Sewa Samiti; Warora/At. & Post; Anandawan/Via Warora; 442914/District Chandrapur; Maharashtra, India.
**RAIN Back Issues**

*Full Back Issue Sets, $120 Postpaid.*

Save $52 when you buy a set; includes everything here (80 issues / $1.50 each).

*Bulk discounts.* Order 10 copies of one issue, pay 50% of price.

**Recent Issues: $5.00**

Vol.14, No.3, Spring 1993
- Homeless Garden Project
- Village-Organized Healthcare
- Center for Appropriate Transport
- Bike Column
- Ecotopia, Bulgaria
  - $5.00 (68 pages)

- Working Communities
- Community Supported Agriculture
- Downtown Community TV
- Cities Against Centralization
- Bike Column
  - $5.00 (*56 pages — Available only in full back issue sets because of the limited number left).*

- Decentralized Politics
- Lao Natural Economy
- Oregon Experiment Revisited
- The Bike Column
- Switzerland’s Example
  - $5.00 (48 pages)

*Knowing Home: Studies for a possible Portland (a 1981 RAIN book).*
Portland, Oregon’s guide to community self-reliance. $5.00 (88 pages)

**Pre-1991 Issues: $2.00**

Vol.1, No.7, April 1975 (16 pages)
- Sharing Smaller Pies
- Spawning Adhocracies

Vol.1, No.8, May 1975 (20 pages)
- Self-Sufficiency Programs
- Networking
- Small Industry Development Network
- OMSI Energy Center

Vol.1, No.9, June 1975 (26 pages)
- People’s Yellow Pages
- Creative Instability
- How Credit Unions Work
- Solar Manufacturers
- Building a Sense of Place

Vol.2, No.1, October 1975 (31 pages)
- In Ecotopia’s Big Woods
- Mapping the Northwest
- Appropriate Technology
- Conscious Culture of Poverty

Vol.2, No.2, November 1975 (32 pages)
- On Inflation, by E.F. Schumacher
- Free Tree Energy
- Learning & Skill Exchange
- Home Insulation
- Paths to a Solar Transition

Vol.2, No.6, April 1976 (32 pages)
- Special Poster Issue
- Visions of Ecotopia Poster
- Make Where You Are A Paradise
- Good-bye to the Flush Toilet Poster
  (*Vol.2, No.6, available only in full back issue sets because of the limited number left).*

Vol.2, No.9, June 1976 (24 pages)
- Community Gardens
- Rural Roots
- Community Building
- Environmental Education

Vol.2, No.10, July 1976 (24 pages)
- Center for Appropriate Technology
- Community Communications Access
- Women & Health
- The Sex Life of a Tree

Vol.3, No.1, October 1976 (24 pages)
- Peddle Power
- Simple Burials
- Pioneering Communities
- Costs of Tourism

Vol.3, No.2, November 1976 (24 pages)
- Eating High & Lightly: Tofu & Miso
- Stolen Goods
- Wood Stove Consumer’s Guide
- Stretch Your Energy

Vol.3, No.3, December 1976 (24 pages)
- Public Interest Law
- Technology & Politics, Part 1, Schumacher Economics, Energy & Employment

Vol.3, No.4, January 1977 (24 pages)
- Solar Greenhouses
- Endangered Skills
- Part 2, Tech & Politics, by Schumacher
- U.S. Bicycle Activists
- Food Distribution & Marketing

Vol.3, No.5, Feb/March 1977 (24 pages)
- Rainbook excerpts
- Citizen Participation
- Exporting Money

Vol.3, No.6, April 1977 (24 pages)
- Using Grey Water In Your Garden
- Windmills: Designing for Jobs
- Better Business
- Ad-free TV

Vol.3, No.7, May 1977 (24 pages)
- Economics of Firch Piles (Salvaging)
- Paths to the Solar World
- How to Make a Bike Barrow
- Technology Is Not the Answer

Vol.3, No.8, June 1977 (24 pages)
- Good-bye Ecology, Hello Androgyny!
- Composting Privy Update
- Passive Solar
- A.T. in D.C.

Vol.3, No.9, July 1977 (24 pages)
- E.F. Schumacher on Good Work
- Demand Water Heaters
- Wind Energy Update

- Household Economy Store
- Prisons of Steel & Mind
- Simplicity
- Shifting Gears (Bicycles)

Vol.4, No.1, October 1977 (24 pages)
- Beyond Myth of Scarcity - Moore-Lappe
- A.T. Entertainment
- Solar Works

Vol.4, No.2, November 1977 (24 pages)
- Community Gardening
- Biological Wastewater Treatment
- A.T. & State Government

Vol.4, No.3, December 1977 (24 pages)
- Low-Flow Wastewater Treatment
- Firefighting
- Culture & Agri-Culture

Vol.4, No.4, February/March 1978
- Basic Transport Vehicles
- Island Power
- World Hunger

Vol.4, No.6, April 1978 (24 pages)
- Suburban Renewal
- Solar Jobs
- National Center for A.T.

Vol.4, No.7, May 1978 (24 pages)
- Freeing Our Forests
- Rich Tech / Poor Tech?
- Wind Energy
- Solar CANADA

Vol.4, No.8, June 1978 (24 pages)
- Government vs. A.T.
- Small Changes are Big, by Wendell Berry
More Back Issues: Pre-1991 $2.00 each.

Vol.8, No.2, November 1981 (24 pages)
Nairobi Renewables
Forestry Beyond Herbicides
(The Future We Spend the Most Time
Imagining Is The One We Get)
Purpa People Heater

Vol.8, No.4, January 1982 (24 pages)
Women Working For Social Change
Wet Fields or Water Power?
Helping Ourselves: Reality/Rhetoric
Imagine Peace

Vol.8, No.5, Feb/March 1982 (24 pages)
Ecotopia Emerging/Ernest Callenbach
WPPSS
Good Cooks
Okanogan Rendezvous

Vol.8, No.6, April 1982 (24 pages)
Kirkpatrick Sale Weighs Human Scale
Ecology of Freedom, by Bookchin
Architecture Alive!
Santa Monica Leads the Way

Vol.8, No.7, May 1982 (24 pages)
Living on the World Equity Budget
Faith Into Action (Christian & Jewish)
Irate Ratepayers, by Patrick Mazza

Vol.8, No.8, June 1982 (24 pages)
Intentional Communities
Building Trust
How to Create Communal Ownership
Tools for Owner-Builders

Vol.8, No.9, July 1982 (24 pages)
Small-scale Pool Culture
Self-help From Ghana
Reach Out & Byte Someone

Vol.8, No.10, Aug/Sept 1982 (24 pages)
Continental Community
Designing For Sustainability
Manifesting Regional Destiny
Sea Treaty

Vol.9, No.1, Oct/Nov 1982 (24 pages)
Ordinary Excellence, by Wendell Berry
Noise Pollution
A.T. Research Centers
*INDEX, Oct 1981 to Aug/Sept 1982

Vol.9, No.2, Dec/January 83 (24 pages)
Green Deserts: Planting For Our Lives
Africa (Sustainable Ag., Puppet shows)
Chinese Aquaculture

Vol.9, No.3, Feb/March 1983 (24 pages)
Appropriate Technology in Oregon
Self-Reliant Cities
Dispute Resolution
The Bioregional Movement

Vol.9, No.4, April/May 1983 (24 pages)
Feminism Issue: Sexism & Militarism
Women & Future Technology
Need for Women in Power
APROVECHO Institute

Vol.9, No.5, June/July 1983 (40 pages)
Real Security, by Amory & Hunter Lovins
The Game of Landfill Salvage
Social Investing
Micro-Hydro

Vol.9, No.6 & Vol.10, No.1, October/November 1983 (40 pages)
The Magazine From Ecotopia:
RAIN’s 10th Anniversary
The State of the Movement
RAINmakers: Where Are They Now?

Vol.10, No.3, March/April 1984 (40 pgs)
Creating a Community Currency
Building Community with A.T.
Sustainable Housing
Prairie Bioregion (Kansas Watershed)

Vol.10, No.5, July/Aug 1984 (40 pages)
Green Politics, by Fritjof Capra
Plugging Leaks in Local Economies
Fukuoka’s Last Straw
Ecology as the Basis of Design
Learn about Ethnobotany

Vol.10, No.6, Sept/Oct 1984 (40 pages)
Art in Everyday Life
Cultural Animation
Popular Culture
Community Gardening
*RAIN INDEX to Volume 10

Vol.11, No.1, Nov/Dec 1984 (40 pages)
Social Change
Solar Power
Edible Landscaping
Ecology of Everyday Life

Vol.11, No.2, Jan/Feb 1985 (40 pages)
Building A New Economy,
(ARABLE, Earthbank and LETS)
A.T. Goes to Grad School
War Tax Resistance
Military Drains Rural Economies

---

RAIN Order Form

**RAIN Subscriptions**

2 year/8 issues..................US$40.00
1 year/4 issues..................US$20.00
Foreign surface mail......add US$ 8.00

Name

Address

City/State/Zip

All orders must be prepaid. Make U.S. Dollar checks payable to RAIN magazine. For those requiring an invoice, the billing fee is $5.00. Send to RAIN, PO Box 30097, Eugene, Oregon 97403.

**RAIN Back Issues**

Individual issues (1991-94).......$ 5.00 each
Individual issues (1976-85).......$ 2.00 each
Per Volume......................$ 20.00
Full set (80 issues listed).......$120.00

Subscription(s)
Gift Subscription(s)
Back Issues
Donations
Invoice fee (see left)

TOTAL ENCLOSED

Page 60  RAIN  Summer 1994  Volume XIV, Number 4
Very special thanks to:
Jered Lawson, Laura Ohanian, Mike Lee,
David Heine, Marc Bouvier, Charlie Mote,
Howard Davis, Jerry Finrow, Michael LaFond,
Chris and Pamela Alexander, Steve Johnson,
Mark Roseland, Efrem Lipkin, Forrest Iawain,
Eric Belfort, Axel Schaefer, Sherry Phillips,
Ruth Bryant, David Atkin, Cathy Ging, Shea
Dean, Stefano DeZerega, Krystee Brumbaugh,
Greg McKenna, Chris Carlsson, Peter Berg,
Marie Dolcini, Greg Holmes, Jason Moore,
Duane and Elaine Janes, Jeff Land, Adam
Diamond, Dan and Cyd Long-Coogan,
Leon Rosselson, Peter McCallum, Allan Hesch,
Hans Loidl, Bruce Robertson, Arun Narayan
Toké, Leslie Rubinstein, Ulrich Richters,
Kurt Jensen, Dean Price, Jessie Glaser,
Erkhart Hahn, Richard Katzev, Carsten Peterson,
Paul Ollswang, Shanti Sosienski, Brian Wilga,
Nils Vest, David Brandt, John Welch, and
Jacqueline Woge. Apologies
anyone who we
have momentarily forgotten to include here.

Illustrations: Paul Ollswang, Michael LaFond

Printing: Corvallis Web Press

Editors: Greg Bryant and Danielle Janes

RAIN attempts to publish quarterly.
ISSN 0739-621x

Subscriptions are $20/year, foreign $28/year,
single issues $5, available from:

RAIN
P.O. Box 30097
Eugene, Oregon, 97403, USA.

Indexed in the Environmental Periodical
Bibliography.

Printed with soybean-based ink on recycled
newsprint.

RAIN publishes information that can help
people live simple and satisfying lives, make their
communities and regions economically
self-reliant, and build a society that is durable,
just, amusing, beautiful and ecologically sound.

Copyright ©1994 RAIN Magazine. Written
permission required for broad reproduction and
distribution (beyond 50 people).

Raindrops

The most obvious news is that we now print on
newsprint, using a WEB press. Our old printing process
was of higher quality, but was so expensive that it always
took many months to recover from financially. Although
we hope to move back to our old printer eventually, the
immediate consequences of the lowered costs are quite
exciting. The most important is that we can publish more
often. Our next issue is not far from being done, and in
three months we should have enough money to print it.
Telling your friends about us, and subscribing, will help us
to shorten our publication intervals.

The other major cause of delay has been our involve­
ment in a great many projects, something we hoped to
curtail after the last issue. As we said then, it is very
difficult to write about inspiring community projects and
then fight the temptation to organize something similar
locally. This certainly helps to focus the magazine’s
subject-matter, and ensures that we know something about
what we write, but it creates unacceptably lengthy gaps
between releases of the magazine.

Some of the projects we have worked with have had a
certain success. Others have been disasters of nearly titanic
proportions, and have inspired in a great many people a
certain caution when embarking upon community-saving
activities. Happily, these experiences now inform our
editorial eye, and we hope that the pieces you find in this
issue emphasize as much as possible the reasons behind the
success of the innovative projects covered.

Contributor’s Guidelines

Readers are always welcome to submit:
1. Notices, press releases, announcements, access to
resources in areas of interest, and items for review.

2. Articles of any length on existing, successful
projects and initiatives of community-scale. This means someth­
ing that any group of people can just get up and do.
This means no: fiction, speculative futures, grand
political schemes, state-reform legislation, authori­
tarian programs, or corporate public relations. Please
try to pry principles from the experience that will
make the piece useful to other activists and commu­
nity members. No public relations pieces: we want
honest, though uplifting, accounts. Since we don’t
find market capitalism very inspiring, no eco-busi­
nesses unless focusing upon some useful methods or
appropriate technologies. We do not consider articles
on the hypothetical wonders of modern technology.
Please query before embarking on writing. Articles
may be heavily edited, depending on the quality
received. Author should obtain photos.