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College of Architecture and Environmental Design
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Dean, CAED:	R. Thomas Jones
CRP Department Head:	Hemalata C. Dandekar
Managing Editor:	Vicente del Rio
Assistant Editor:	Umut Toker
Editorial Board:	CRP Faculty Associated Students in Planning
Design & Layout:	Vicente del Rio & Umut Toker Brianna Holan & Yousman Okano <i>(original lay-out project & logo)</i>
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VICENTE DEL RIO

FOCUS now completes eight long years of existence; a time span in which we saw the budget for education deteriorate, classes increase or be cancelled, registration shrinking, and numerous colleagues losing their jobs. It is not a time to rejoice but to be strong and help fight this crisis. However, thanks to CRP's many conquests and the quality of its undergraduate and graduate programs, faculty, and students, our department has managed to stand high and strong. And FOCUS is living proof.

In the present issue we have moved the "Cartoon Corner" to... a corner, the inside back page, where the cartoons will be published in full color, providing FOCUS with a spirited closing. But we are planning significant changes for next year. We decided not to pursue having FOCUS published for Open House but for the fall quarter instead. This will not only allow us to include articles and accounts on classes and projects that coincide with the academic year, but it will give us the summer time to deal with the huge tasks behind publishing. In addition we are planning changes in graphic design, so next year FOCUS might surprise you with a "face lift"!

After the customary introductory notes by department head and professor Hemalata Dandekar, FOCUS opens with an astute chronicle by Chris Clark in "A Planner's View." As an experienced planner and lawyer with a degree in linguistics, Chris is a champion of words who makes reading a delight. He will amuse you with an account of a class when he had students design new systems of law for a reinvented nation, each group assuming a different approach from "nimbians" to "profiteers".

The "Essays" section brings two important scholarly contributions. Henry Sanoff, distinguished professor of architecture at the University of North Carolina, Raleigh and an international authority in participatory design, writes about the evolution of the field, its role in building democracy, and the different types of community involvement. Next, Daniel Levi, professor of psychology at Cal Poly, and planning consultant Sara Kocher discuss their research on sacred places and more specifically on wats –Buddhist sacred precincts, their cultural meanings and implications for place identity, and the conflicts between tourist and religious uses.

The section "Faculty and Student Work" brings you articles that are excellent representatives of CRP's work: two are project-oriented and two are research-oriented. Faculty del Rio, Nuworsoo, and Toker write about results of a contract with Madera County's Planning Department: a series of community workshops, a transportation plan, and an urban design plan for the Avenue 12 Corridor. Anthony Kiet, architect and MCRP student, writes on the morphology of Arab cities, the impacts of modernism, and how to reconcile planning and design with traditional cultural values. Professor Hemalata Dandekar and Adrianna Jordan, an MCRP graduate, discuss their research on the influence of the railroad in San Luis Obispo's development, its morphology, and in the distribution of architectural types. The section closes with faculty Hemalata Dandekar and Umut Toker writing on their experience supervising interdisciplinary graduate teams in the Gerald H. Hines National Student Urban Design Competition, promoted by the Urban Land Institute.

The "International" section features faculty Adrienne Greve describing her experience as a guest presenter in an international forum on planning and climate change in Rio de Janeiro, Brazil. The Professor Dandekar opens the "Spotlight" section with an article on last year's studios, which covered a lot of ground both in scope and in geography --from Madera and Fresno counties in the North to Los Angeles in the South. Recent CRP graduates follow with their articles. Scott Harmstead, an associate planner with Madera County's Planning Department, describes his trip to India on a program for young professionals sponsored by Rotary International. Melissa Streder writes about her professional trajectory and her present job at Caltrans in San Luis Obispo. Jason Kambitsis, a planner with the City of Pittsburgh PA, discusses guidelines that all young planners face in some point along their career. And, as customary, the "Spotlight" section closes with the abstracts of the master's thesis and professional projects finalized this past year.

We hope you enjoy the reading and that you recommend FOCUS to colleagues and friends. We are also on-line at <http://digitalcommons.calpoly.edu/focus/>



Vicente del Rio, PhD is a professor at Cal Poly's CRP Department and Focus's managing editor.



*Hemalata C. Dandekar, PhD.
is professor and head of the
CRP Department.*

HEMALATA C. DANDEKAR

Volume VIII of Focus finds Cal Poly's City and Regional Planning Department embarked on a scrutiny of ourselves as we complete the self-studies of our graduate and undergraduate program. These self-studies, designed to inform the Planning Accreditation Board (PAB) about us, are serving to provide us a reason to pause and reflect on what we have achieved to date. Key in this is our understanding of our more than 1,300 alumni, what they have achieved, their contributions to planning, and how their education in CRP has served them. To help us in writing this story the CRP holiday card included an alumni survey. Thank you to the many alumni who responded. If you are an alum and did not, it is not too late! The survey can now be taken on-line at: http://www.surveymonkey.com/s/CRP_Alum_survey_2010

A few moments of your time to complete the survey is very much appreciated. It will help us with our report and allow us to celebrate alumni achievements. Look for an overview of survey findings in the next Focus.

The PAB site visitor team will visit the campus October 3-5, 2011. In preparation faculty has taken a hard look at the goals and objectives for our department and its programs, eliciting input from alumni, employers, and our current students. We welcome your review of these draft goals and objectives, which are posted on the CRP web site. Your critique and comments are most welcome at the crp@calpoly.edu email.

I am now well into my second year as Head of Department of City and Regional Planning. It has been a very productive and stimulating time. The budget concerns mentioned in the last issue of Focus have not dampened the enthusiasm of our students and the high quality of their work nor that of CRP faculty. It continues to be a privilege to serve with this collegial and dedicated faculty team and continue the longstanding tradition of excellence that characterizes this department. As you browse through this issue of Focus please keep an eye out for opportunities that appeal to your own engagement with the CRP family— by creating an internship, serving as a mentor, supporting a student project, organizing an alumni get-together, creating a scholarship for students in certain specializations, endowing a grant to support student international travel and exposure, or facilitating a symposium on a particular planning topic that might benefit from debate and scrutiny. We welcome and look forward to your support and collaboration in any of these and other efforts that might move us forward.

As we did in the last issue this FOCUS reviews highlights of the community-based projects that CRP students completed this past year. A majority of these studios were sponsored by the communities we worked in, and for. We hope to continue this longstanding tradition. Please take a look at our studio sequence in my article in the Spotlight section and contact us if you have a project you would like to engage with us on.

We are expanding our international offerings over the summer this year with a two-week course in Turkey and a four-week course in Lisbon. We see these international exposures as adding value and strengthening our already strong core curriculum and our commitment to planning in California. These courses are add-ons and will help to invigorate our curriculum, and build up the capacity of CRP students, empowering them to work in the global arena, where they will need to practice in the future. We believe that the learning from such offerings sustains and strengthens our students capacity to be competitive and helps them succeed in these difficult economic times.

This issue of Focus highlights the achievements of student, faculty, alumni and friends of CRP. Please participate in our journal as a contributor, a donor, or simply by sending us your opinions—all are important. This year, as in the past, through Focus we welcome you to our world and what inspires us. Do send us news of your activity or successes. We'd love to hear from you – crp@calpoly.edu.

HAIL NEO NATALIA!

CHRIS CLARK



Chris Clark is full time lecturer at the City and Regional Planning Department. He is principal at Crawford Multari & Clark, San Luis Obispo.

“Professor Clark, can we do something fun in class next week?” Fun? In a land use law class? Such was the mood in the eighth week of our winter quarter, what with the occasional rain cloud intruding into our Mediterranean climate. So I thought about it, and obliged with an odd bit of work.

Here was the assignment:

Inspired by recent uprising throughout the Middle East and Northern Africa, an unusual set of American groups have convened in separate quarters to outline a future for a reinvented United States. Each of these four groups has a very different calling, and consequently a unique approach to developing a new government. In honor of the rebirth of the nation, they will call this land Neo Natalia.

The groups have been busy designing a new system of laws. This week they have arrived at land use and public involvement (having recently had their way with the tax code).

The four groups are constituted as follows:

- **Nimbians:** these brave souls have lived next to every form of land use abuse, from Wal-Mart’s to barking dogs. They will fashion a world which no longer bothers them.
- **Governators:** employed in the public sector, they envision a government of the government, by the government and for the government.
- **Earl Greys:** these folks don’t envision much of any government; less is more, and even less than that is better.
- **Profiteers:** regulation stymies investment, rules are made to be bought, the higher the margin the happier they get.

In each of their respective Constitutional Conventions, they will address the following:

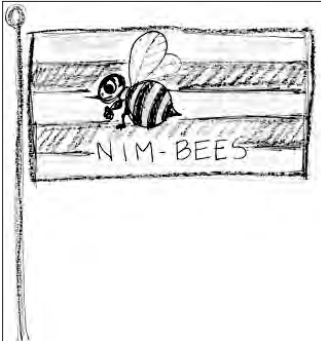
1. **General Plans.** What is the basic arrangement of land uses and services.
2. **Zoning.** What are the land use regulations that will control the development of Neo Natalia.
3. **Due Process.** How, and to what extent, the public will be involved in decision-making.

Here was the result:

Nimbians: Not even close to my backyard

Representative Democracy

The government is led by a team of elected representatives - one representative from each zoning district. Additionally, each zone elects a representative to oversee the management and design of the greenspace. Representatives are elected by majority. Votes by residents over the age of 50 count “double,” since seniors are especially sensitive to nuisances and are a protected class. Majority rule is also used in decisions such as where to expand, how to zone land newly acquired land, architectural review, transit service schedules, and park amenities.



Zoning

There are four zoning districts: Residential, Commercial, Nuisance, and Greenbelt. The first three zones are hexagonal-shaped districts with greenbelt buffers in between. These greenbelts would contain a limited number of uses, as well as bullet trains used to connect the different districts.

In the event that a proposed use is not assigned to one of the zones, the citizens can vote on where such a use should be located.

Residential-Single family homes, Multi-family residences, Quiet civic uses (e.g. libraries). The residential districts would have tiered height limits, with the tallest buildings in the middle and the shortest buildings on the periphery so every building has some view of the greenbelt.

Commercial-Schools, Churches, Quieter stores, Hydroponic urban farms. Offices, no businesses with strong odors

Nuisance-Adult stores, Big box stores, Manufacturing, Airports, Other industrial uses, Sewage, Underground prisons, Facilities giving off strong odors

Greenbelt-Hospitals, Recreation, Transport (e.g. bullet trains)

Process for Nuisance Complaints / Lawsuits

Any individual or entity from any zone (i.e. a resident from the Residential zone, or a church leader from the Commercial zone, or a business owner from the Nuisance zone), can sue any other entity for an injunction against a nuisance. The threshold for demonstration of a nuisance is graduated, depending on the zone. The threshold is very low if the alleged nuisance is originating in the Residential zone, and the burden of proof is on the defendant to prove that the activity is not a nuisance. In the Nuisance zone, however, the threshold is very high, and the burden of proof is on the plaintiff.

Plannertopia: If the Governators had their way

Principles

Government knows best. The primary role of the government is to pursue peace, safety and wellbeing for all constituents in the most efficient manner possible.

Private rights are allowed pursuant to Government Code Section 000.00 [not yet written]. All shall have the right to practice religion and freedom of speech in designated areas and at specified days and times.

All land shall be owned and managed by the government, thereby eliminating the possibility of a taking.

Due Process

All projects and requests will be subjected to a discretionary hearing process.

All persons have the right to due process, conditioned upon the following:

- An appointment is made with the district Public Communication Officer.
- A formal written request is made to obtain a public commentary permit.

- Public commentary permit fees are paid in a timely manner.
- Any and all public commentary is submitted in written form.

All persons have the right to appeal a decision made by an advisory body, once a formal request has been made and all relevant fees have been paid.

General Plans and Zoning

General Plans are long and comprehensive; Zoning codes detail development requirements for any and all possible scenarios.

Variations are obsolete.

All zoning districts shall be alphabetized and segregated to reduce nuisances.

All transportation shall be publicly owned and operated to maximize efficiency. The only private modes of transportation are walking and bicycling (government issued bicycles)

Uniform building design specific to each zoning district.

Individuals may apply for permits to make minor temporary alterations to buildings.

Every jurisdiction shall be centered around a grand government compound.

Earl Greys: Land Use and Public Involvement

Our basic philosophy: We don't envision much of any government; less is more, and even less than that is better.

Since we do not believe in government, it is important for the reader to know that the following description of the Earl Grey system is by no means any type of legal document in and of itself, but simply a description of our form of non-government.

- Zoning / General plan. There is no General Plan for our new land, in fact, most of the current US Constitution has been thrown out, except the first amendment, which is all that is really needed. Basic freedoms for all are guaranteed. Everyone is free to do whatever they wish so long as they do not infringe on anyone else's rights.
- Public Participation. There are two types of public participation according to Earl Greys: the court system and small-scale community meetings. Since there are no regulations, people must sue when they believe their rights have been violated. Most court cases are decided by a jury (definitely not by a judge!) and most remedies are monetary. Prison sentences are very rare and applied only if arrangements can be made with the prison-owner. Executions are performed if the criminal is dangerous and the prison-owner cannot or will not agree to take custody. Sometimes convicts are sent to a faraway land called Antarctica if a ship-owner agrees to take him or her there.
- Community meetings are never organized by any governmental entity (what government?), but by community members when group cooperation might be necessary, for example, for "public" services (see below):

- “Public” services. This section includes a discussion of some formerly thought of as public services. Since there is no government in our new land, these services and infrastructure are purchased or operated by local groups of people or individuals. For example, in the case of roads, inter-regional roads are typically toll roads and owned and maintained by a private owner. Local roads are paid for through due collection, similar to a fee structure set up through a homeowners’ association. For police and fire, people pay dues to obtain services: “no payment, no protection” is the motto. Medical services function under the same principle. For parks, members of a community can choose to create and maintain a park and have unlimited access. Anyone else can enjoy the park under agreement with the owner(s), usually through a pay-per-use fee. Schools are privately owned and optional. Most families who can afford the tuition send their children to school, others need to work out a deal with the school owner, usually through a scholarship or work-study agreement (like chopping fire wood, or directing traffic, etc.)
- Trade & economic base. Goods can come from anywhere in the world. There are no tariffs, but the port owners & operators are free to charge any fees they wish.

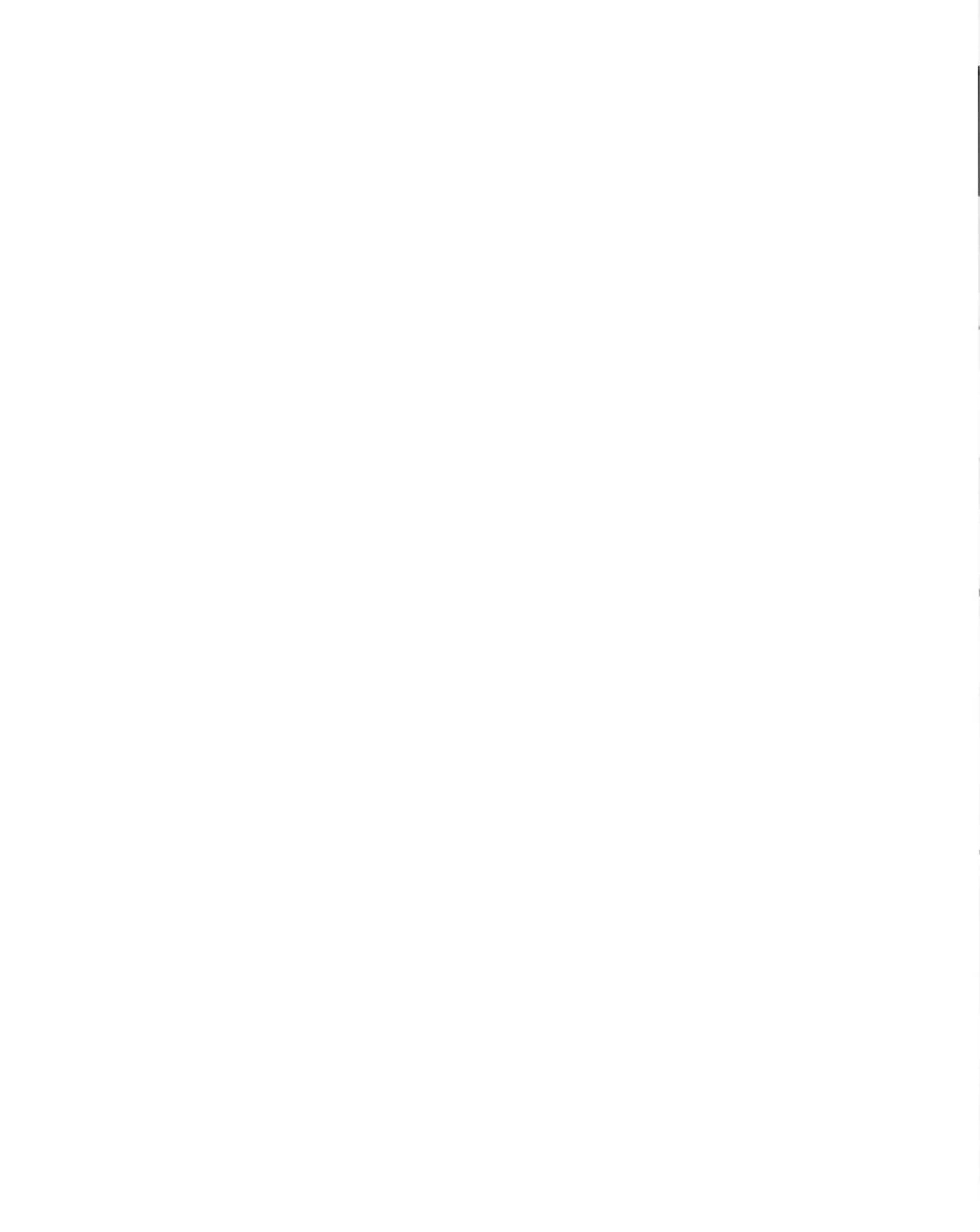
Finally, and surprisingly, the Profiteers. Freedom is not free.

This group took a different tack. While I had anticipated they would be talking about how government needed to treat this overtly capitalistic group, they instead took over the government. And used it to turn a profit. Here’s how: it keeps the Council from accidental testimony without compensation.

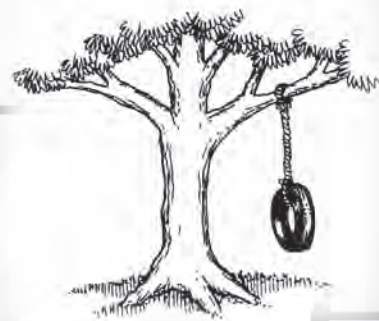
- Zoning – we’ll sell it to you. You want to develop expensive commercial property, that entitlement can be purchased. It will be more expensive than the person who is providing affordable housing.
- Planners – We need to make a profit. We will accumulate revenues and then share them as “bonuses” at the end of the year for the planners who bring in the biggest permit fees.

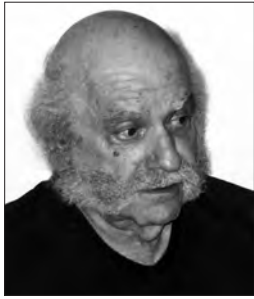
Well, so much for that. It was fun to look at the world through different lenses. But the fun is over.

Back to work.



ESSAYS





Henry Sanoff, AIA, Distinguished Professor of Architecture, School of Design, North Carolina State University. He was a speaker in Cal Poly's 2006 Hearst Lecture Series.

MULTIPLE VIEWS OF PARTICIPATORY DESIGN

HENRY SANOFF

Professor Henry Sanoff is an internationally respected scholar who has been studying, publishing, and working with participatory design for more than forty years. His books and articles appear in several languages, and he has taught and served as a consultant all over the world. This article discusses the historical background of participatory design, its role in a democracy and in building community, and the different types of participation.

Historical Background

Citizen participation in community decision-making can be traced as far back as Plato's Republic (Plato and Grube, 1992). Plato's concepts of freedom of speech, assembly, voting, and equal representation have evolved through the years to form the basis upon which the United States was established. Some historians support the notion that Americans have always wanted to be part of decisions affecting their lives. Billington (1974) contends that freedom and the right to make decisions on the early American frontier was the shaping force in grass roots democracy, i.e., people's right to participate. As many frontier villages grew in population it became increasingly difficult for every citizen to actively participate in all community decisions. To fill the void in the decision-making process, people began to delegate their involvement to a representative, which grew into the system of selecting officials by public elections, and the increase of volunteer associations and organizations (de Tocqueville, 1959). Although public participation can be approached and defined in many different ways, this discussion is concerned with participation aimed at issues involving community decision-making.

Community consciousness in the 1960s led to direct involvement of the public in the definition of their physical environment and an increased sense of social responsibility constituted a new movement. Following this movement, community design centers aiming to offer design and planning services to enable the poor to define and implement their own planning goals, were established in the United States and the United Kingdom. They were influenced by Paul Davidoff's advocacy model of intervention. Similarly, many design and planning professionals rejected traditional practice (1965). Instead they fought against urban redevelopment, advocated for the rights of poor citizens, and developed methods of citizen participation. Government financial aid programs that encouraged the participation of citizens in community improvement programs supported this movement. With these programs, people outside the professions were allowed to make decisions about planning and financing. Citizens were given the right to participate in planning and implementation processes through grants and technical assistance (Sanoff, 2005). Volunteer citizen participation continues to be one of the key concepts in American society.

In northern Europe, participatory design grew out of work beginning in the early 1970s in Norway when computer professionals, union leaders, and members of the Iron and Metalworkers Union strove to enable workers to have more influence on the introduction of computer systems in the workplace (Winograd, 1996; Spinuzzi, 2005). Several projects in Scandinavia set out to find the most effective ways for computer-system designers to collaborate with worker organizations to develop systems that most effectively promoted the quality of work life. Pelle Ehn describes a design philosophy called the "tool perspective," whereby new computer-based tools should be designed as an extension of the traditional practical understanding of tools and materials used within a given craft of profession: "Design must therefore be carried out by the common efforts of skilled, experienced users and design professionals. Users possess the needed practical understanding but lack insight into new technical possibilities. The designer must understand the specific labor process that uses a tool" (Ehn, 1992, 112). In Denmark, the MUST-method, a method of participatory design that creates the

Note from the editor:

This article was originally published in the *Journal of the Faculty of Architecture, Middle Eastern Technical University*, volume 23 no.2, 2006. Reproduced with permission.

computer support for the production and airing of radio programs identifies strategic analysis and visioning as the main design activities (Bodker et al., 2004).

In an alliance called Computer Professionals for Social Responsibility (CPSR) participatory design is described as an approach to the assessment, design, and development of technological and organizational systems that places a premium on the active involvement of workplace practitioners in design and decision-making processes.

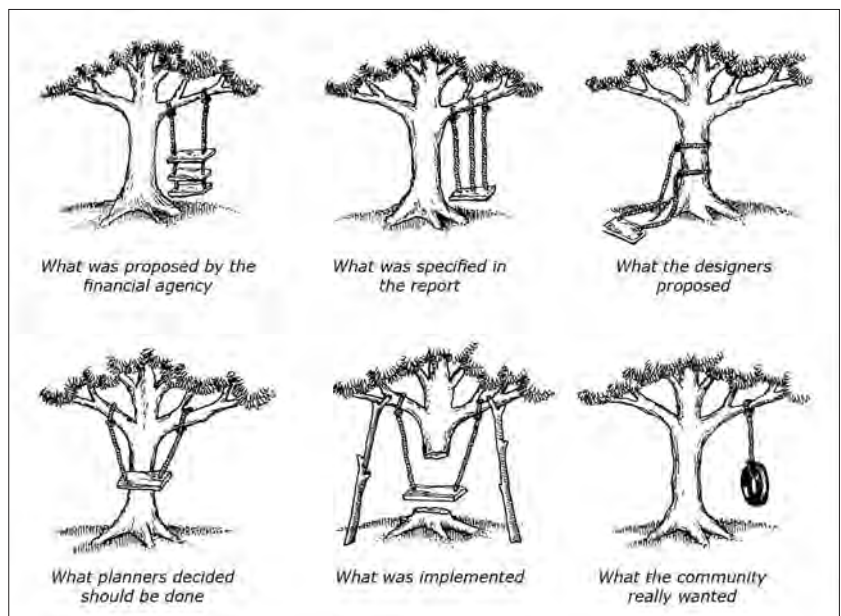
The International Association for Public Participation (IAP2), founded in 1990, seeks to promote and improve the practice of public participation in relation to individuals, governments, institutions, and other entities that affect the public interest in nations throughout the world. Core values for the practice of public participation include that the public should have a say in decisions about actions that could affect their lives and that their contribution will influence the decision. Participants should be provided with the information they need to participate in a meaningful way and be informed how their input affected the decision.

The Participatory Geographies Working Group (PyGyWG) based in the UK, reflects a surge of interest in the study and application of participatory research methods such that geographic research should have benefits for those affected by the social, economic, and environmental issues, which are at its heart. A range of participatory principles underpins participatory geographies, such as a focus on empowerment and collective action where participants learn from their engagement in the process. The PyGyWG believes that participatory work should be proactively inclusive with practitioners actively attempting to include and seek out people who are often ignored or do not take part in community development or research processes. Participatory geographers, therefore, often seek to work in bottom-up ways with the goal of actively engaging and benefiting groups outside academia so that traditional barriers between 'expert researcher' and 'researched community' are broken down (PyGyWg, 2006).

Participatory Definition

Participatory design is an attitude about a force for change in the creation and management of environments for people. Its strength lies in being a movement that cuts across traditional professional boundaries and cultures. The activity of community participation is based on the principle that the environment works better if citizens are active and involved in its creation and management instead of being treated as passive consumers (Sanoff, 2000). Democratic theory has always stressed citizen participation in public decision-making. With few exceptions, however, democratic theory has traditionally encouraged 'low quality citizen action by making a fetish out of only one form of political participation--voting' (Pranger, 1968,30). Despite the insistence on 'citizen rule' in the ideology of democracy, large segments of the population in all modern nations are in reality powerless to

Figure 1
Classic cartoon about needs and deliverables without participation. (original source unknown; this illustration by J. Azevedo in V. del Rio "Introducao ao Desenho Urbano"; Rio de Janeiro: Pini, 1990)



significantly affect the political decisions, policies, and actions of their societies. The concept of participatory democracy, which emerged in the 1960s, was a rediscovery of traditional democratic philosophy (Olsen, 1982). The central features of a participatory democracy can be distilled into the following definition.

In a participatory democracy, collective decision-making is highly decentralized throughout all sectors of society, so that all individuals learn participatory skills and can effectively participate in various ways in the making of all decisions that affect them. Particularly crucial in this conception of participatory democracy is the insistence that full democratization of decision-making within all local and private organizations is a necessary prerequisite for political democracy at the national level. It has been argued that a participatory democracy leads to persistent conflict, eventual alienation from the political system, and unnecessary and expensive delays (Rosner, 1978). This argument holds that a majority of the population, who do not now actively participate, hold attitudes that are intolerant of any deviation from the cultural norm. Consequently, if more of these people are drawn into active political life, these attitudes will influence the political process such that they will affect the survival of a democracy.

In recent years, however, the idea of participatory democracy has invaded numerous areas of social life, including industry, neighborhoods, and race relations. Most evident has been the rapid expansion of relatively formalized programs for promoting participation in community programs and government (Cahn and Passett, 1971; Lind, 1975). The development of a communities' potential through collaborative problem solving is described by social scientists as participatory action research (PAR), where citizens are empowered to effect social change by controlling the knowledge produced by participation (Whyte, 1991).

"Is participatory democracy a realistic direction for our future?" was a question asked in a study in five U.S. cities--Birmingham, Dayton, Portland, San Antonio, and St. Paul--in ten comparison cities, and in seventy participation projects throughout the country over a two year period (Thomson et al., 1994). The findings revealed a positive relationship between participation and support of the system, trust in government officials, and tolerance toward other's points of view. The stronger the participation system and the more people who participate, the greater the support for democratic values.

Deliberative Democracy

Carson (2003) recognizes the deficiencies of representative government and proposes to engage in deliberation, or build deliberative capacity whereby citizens' work towards collective outcomes. She describes her approach as deliberative governance, which advocates democratic problem-solving initiatives. Proponents of citizen deliberation argue that participation in deliberative forums has a positive impact on citizens' attitudes and behaviors. The potential benefits of deliberation include more informed and reflective judgments, a greater sense of political efficacy, and an increase in the frequency of political action (Bohman, 1996; Cohen, 1997; Gastil, 2000). Sirianni and Friedland (2005) refer to a deliberative democracy whereby citizens and their representatives deliberate about community problems and solutions through reflection and judgment, with the willingness to understand the values and interests of others in a search for mutually acceptable solutions. Deliberative democracy introduces a different citizen voice than that associated with public opinion and simple voting. It seeks a citizen voice capable of recognizing other group's interests, appreciating the need for trade-offs, and generating a sense of common ownership. The practical question for design and planning professionals is how best to be deliberative within conflictual, adversarial settings (Forester, 1999).

Underpinning a deliberative democracy is Atlee's (2003) concept of collective intelligence (CI), which is based on the ability of groups to sort out their collective experience in ways that help to respond appropriately to

circumstances--especially when faced with new situations. Atlee (2003,53) describes collective intelligence as a shared insight that comes about through the process of group interaction, particularly where the outcome is more insightful and powerful than the sum of individual perspectives. Collective intelligence has been suggested as being partly responsible for favorable participatory-design outcomes (Fischer et al., 2005).

To increase the effectiveness of our democracy, Atlee advances the idea of Citizen Deliberative Councils (CDC), which are small face-to-face groups of diverse citizens that convene for short periods of time to consider some public concern. Deliberation, states Atlee, is a form of dialogue with the intention of producing decisions, policies, recommendations or collective action. Deliberation involves a careful consideration of an issue, examining the facts, viewpoints, and consequences related to it. Unlike an open participatory forum, a CDC is an organized group of people selected such that their collective diversity reflects the diversity of the larger population from which they were drawn. Unlike public hearings, which are often aimed at airing views, citizen deliberative councils are small, usually between ten to fifty people, and generate a specific product such as a recommendation, which would generate further community dialogue.

Sense of Community

Building a participatory democracy also means building an increased sense of community among the population at large. When people have a strong sense of community, they are more likely to respond positively to efforts to solve community problems, and will be willing to contribute their time and resources to meeting community needs (Morris, 1996). The process is a stabilizing rather than a destabilizing force. Increased participation efforts do bring in more people who initially have a lower sense of community than is typical for those who are politically involved. But these efforts also develop the participants' sense of community for as long as they remain involved (Thomson et al., 1994). Planners and architects facilitating a collaborative design process is described as "co-design" by King (1983), with such benefits as creating events that allow for social interaction and developing a sense of community through face-to-face interactions, and publicly affirming community values.

Similarly, the unique qualities of places where planning and development occur can play a critical role in the process as well (Manzo, 2006). Citizens' attachment to places in their community can help to inspire action because people are motivated to protect and improve places that are meaningful to them. Sense of community has been linked to place attachment at the individual and community scale. Rivlin's (1987) study of a Brooklyn neighborhood found that attachment to the neighborhood served as a precondition for the development of a sense of community among neighbors. Both sense of community and place attachment are linked to participation; consequently sense of community has become a key planning goal (Morris, 1996; Perkins, Brown and Taylor, 1996). Other studies in participation conducted during the past decade have referred to such benefits as citizen empowerment, increasing social capital and promoting a sense of community (Guy, 2002).

The effectiveness of community organizations, social relationships, and mutual trust is referred to as social capital. It is a measure of the social networks in a community with such indicators as civic education, community leadership, volunteerism, community pride, government performance, and capacity for cooperation (Bens, 1994). Therefore, social capital, along with place attachment can be perceived of as community assets that can be created through community participation (Kretzmann and McKnight, 1993). A community organizing approach described as Asset Based Community Development (ABCD) sees citizens as assets and as co-creators of their community. Citizens discover, map, and mobilize the assets that are within the people in the community, as well as informal associations and formal organizations. Active community participation is key to building an empowered community. Empowerment is where people, organizations and communities have

control over their affairs (Rapoport, 1987). Communities seeking to empower themselves can build active citizen participation by welcoming it, creating valuable roles for each person to play, actively reaching out to build inclusive participation, and creating and supporting meaningful volunteer opportunities. Studies of empowerment demonstrate that such power is achieved on the strength of interpersonal relationships among those working towards a common goal (Perkins, 1995). Shiffman states that, “community development is not simply rebuilding...it is...about social and economic justice” (PICCED,2000). Speer and Hughey (1995) claim that shared values and strong emotional ties are more effective bonding mechanisms than reactions to community issues alone.

Participation Objectives

Clearly, participation is a general concept covering different forms of decision-making by a number of involved groups (Wulz, 1986). Participation can be addressed effectively if the task of participation is thought of in terms of what is to be accomplished when there is an acknowledged need to involve community members. Conceptualizing the issue means asking simple questions: who, what, where, how, and when?

- Who are the parties to be involved in participation?
- What should be performed by the participation program?
- Where should the participation road lead?
- How should people be involved?
- When in the planning process is participation desired?

The planning that accompanies the development of any participation event should first include a determination of objectives to, for example, generate ideas, identify attitudes, disseminate information, or review a proposal. The list of possible participation objectives will differ from time to time and from issue to issue. Once the objectives of community participation are stated, it becomes clear that participation is perceived according to the type of issue and people involved. If differences in perception and expectations are not identified at the outset, and realistic objectives are not made clear, the expectations of those involved in the participation program will not have been met, and they will become disenchanted. Planning for participation requires that participation methods be matched to the objectives, and the appropriate method be selected. The professional’s role is to facilitate the community’s ability to reach decisions about aspects of their environment through an easily understood process. Facilitation is a means of bringing people together to determine what they wish to do and helping them find ways in deciding how to do it. Facilitation can also include the use of a variety of techniques whereby people who are not professionally trained can organize themselves to create a change in the environment

Citizen participation has a broad value to community life. In a general sense, the purpose of citizen participation is to inform the public, get the public’s reactions regarding the proposed actions or policies, and engage in problem solving to come up with the best solutions for everyone (Creighton, 1994). What adds legitimacy to a decision is not only the substance of the decision but also the perception that the process by which the decision was made was fair, open, and democratic. This is true, even if some individuals or groups do not agree with the final decision. History shows that better public decisions happen when the public is involved in the decision-making process. People have more ownership for the program’s success if they have had a part in creating it. They also hold a key element that only comes from their experience. Decision-makers need the voice of experience to line up with facts and figures produced by studies.

Strategic Planning and Visioning

Participation does not imply that there is no longer a role for municipal authorities. It only means that a dialogue is necessary between citizens and public officials regarding needs and resources to meet needs (Sanoff, 2000). This dialogue may take the form of a vision statement implemented by a strategic plan.

Visioning is a process that seeks to 'create living, useful guides for actions intended to position the community for the future' (Thomas et al., 1988). A community group is ready for a visioning process when there is some dissatisfaction with the present situation, when there is a sense that they must pursue a different future than one suggested by the present approach. Participants in a visioning process are asked to contribute ideas at the beginning, before experts and administrators narrow the range of options. Visioning reinvigorates citizenship in communities where it is used.

A visioning process is usually the central element in a community's strategic plan. Participants are asked to think about how the community should be and find ways to identify, strengthen, and work toward a community vision. Such information helps the visioning participants understand the context and constraints under which they are operating. Although specialists may carry out specific policies and recommendations, citizens remain responsible for the framework within which decisions are made. The shared vision belongs to the group rather than to any one individual.

Strategic planning is a management technique borrowed from the private sector. Poister and Streib (1989) report that 60% of cities with populations of more than 25,000 use some form of strategic planning. Basically, strategic planning is an organized effort to produce decisions and actions that shape and guide what a community is, what it does, and why it does it. Strategy is the act of mobilizing resources towards goals. It includes setting goals and priorities, identifying issues and constituencies, developing an organization, taking actions, and evaluating results (Checkoway, 1986). Strategic planning requires information gathering, an exploration of alternatives, and an emphasis on the future implications of present decisions. It can facilitate communication and participation, accommodate divergent interests and values, and foster orderly decision-making and successful implementation.

A strategic plan is a method of developing strategies and action plans necessary to identify and resolve issues. The challenge in creating a plan is to be specific enough to be able to monitor progress over time. To be usable, a strategic plan should have built-in flexibility to allow for revisions to occur, as new opportunities become apparent. Strategic planning is action-oriented, considers a range of possible futures, and focuses on the implications of present decisions and actions in relation to that range (Bryson, 1988). The development of a strategic plan requires the creation of a vision statement to provide suitable guidance and motivation for the ensuing process. The vision should emphasize purposes arrived at through group sessions in order to establish a common reference point for the broad objectives of the community. It outlines the key areas of concern within the community and will help people make decisions that support that vision.

Figure 2
Community workshop
where small groups
worked together to develop
a plan for an Arts Center.



Making community participation work means a commitment on the part of the local government division or community agency initiating the process. Local governments seeking citizen participation must want, and be willing to accept, citizen input (Moore and Davis, 1997). When participation is successful, the following are some of the benefits the community receives (Creighton, 1994).

- Improved quality of decisions
- Minimizing cost and delays
- Consensus building
- Increased ease of implementation
- Avoiding 'worst-case' confrontations
- Maintaining credibility and legitimacy
- Anticipating public concerns and attitudes
- Developing public expertise and creativity.

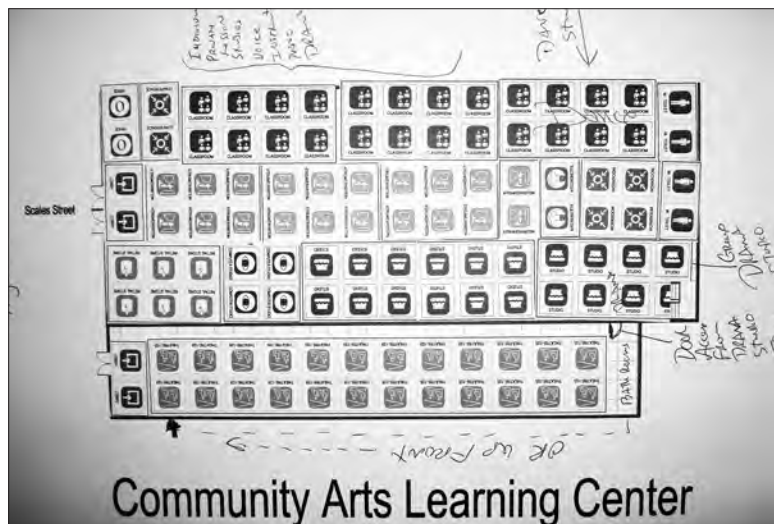
Promoting Participation

Being intentional about how a participation program is designed helps to ensure that it will involve the public in the places where their input is most needed. Good planning for community participation requires careful analysis. Although it is critical to examine goals and objectives in planning for participation, there are various techniques that are available, each of which performs different functions. In the last several decades, there have been numerous efforts to accumulate knowledge about various participation techniques, as well as the function that these techniques perform. Community surveys, review boards, advisory boards, taskforces, neighborhood and community meetings, public hearings, public-information programs, and interactive cable TV, have all been used with varying degrees of success, depending on the effectiveness of the participation plan. Because community participation is a complex concept, it requires considerable thought to prepare an effective participation program.

Figure 3

Typical solution where each group developed a concept for an arts center using graphic symbols corresponding to spaces.

Informing a large audience about proposals, generating interest, or securing approval can take the form of a community meeting also referred to as a public hearing or a public forum. Public meetings allow community leaders to present project information at any time during the process. The tight structure of such meetings, however, does not permit ample time for discussion. Although referred to as community participation, only



the most aggressive personalities tend to participate and often dominate the discussion (Creighton, 1994). Public reactions in open meetings are often taken by a vote through a show of hands. The key to making community design work effectively is a range of techniques for enabling professionals and citizens to creatively collaborate, where voting is replaced by consensus decision-making.

A community in Tennessee encountered a lack of involvement and a certain degree of apathy within the community that was not initially anticipated when the strategic plan was developed (Reid, 2000). Consequently, there was a gap between project needs and the human resources available to meet them. It became evident that public participation is a powerful force that can significantly impact activities within the community. As

a result, community leaders focused on maintaining direction despite declining participation. One example of this need to maintain direction became clear while examining the feasibility of a county community housing development organization. Negative preconceptions about its purpose and role resulted in poor attendance at subcommittee meetings. Among the steps taken by the community organizers to address lack of involvement and improve public awareness were these:

- Establishing a policy of inclusiveness
- Holding open meetings
- Making speeches to community groups
- Obtaining public input
- Making public announcements
- Holding face-to-face meetings
- Conducting progress surveys

Consensus

The idea of consensus has been evident since ancient history, in the notion of *consensus gentium*, the Latin phrase for ‘agreement of people’ (Gove and Merriam-Webster, 1986). Contemporary views of consensus have evolved from educational and political philosophy. In the political world, consensus usually means that a significant majority of people supports a particular proposal. In small group situations consensus is usually thought of as unanimity in agreement.

There is a dark side of consensus in that it protects the system from change and results in homogeneity (Muldoon, 1996). The view is that agreement oriented processes have achieved their goal by pressuring people toward an uneasy unanimous goal, that they are a manipulated form of consent. The pressure for consensus has the potential to inhibit the argumentative process as well as silence those who are marginalized. “Real” consensus, according to Atlee, comes about as a result of “comfortably agreed-to outcomes achieved through real dialogue,” where differences are creatively explored (2003, 238).” Through shared discovery, where people listen to each other and identify points of agreement and disagreement, a process of co-sensing is achieved.

On the grounds of equal participation and the development of consensus, Connolly (1969) coined ‘the arena theory’, which involves an ultimate appeal to the notion of consensus. This theory advocates the exchange of expert and experiential knowledge. The assumption of the arena theory is that there is at least one agreeable outcome to which all parties come to a consensus. However, there must be a willingness of groups to accommodate one another. Such consensus cannot be achieved in isolation. Through the iterative process of social learning and through the equality framework of the arena theory, a consensus can develop.

Group ownership is considered a significant strength in furthering ideals of consensus. As Avery (1981, 20) states, ‘Group ownership acknowledges that new concepts are developed through the process of members responding to previous contributions of other members.’ With group ownership of ideas, it is the idea itself, not the presenter that is criticized. Through this process, all participants are involved in developing ideas and decisions where consensus has to do with shared insight or awareness. When faced with complex problems and diverse interests, collaborative decision-making embraces face-to-face interaction and encourages creativity, open communication, broad participation, and agreement. Designing a clear, well-managed collaborative process can lead to agreement where all participants are likely to receive wide community support during implementation.

Conclusion

In organizational development, participation refers to an approach that is rooted in trust, intimacy, and consensus. This relationship described by William Ouchi (1981), known as Theory Z, is where the decision-making process is typically a consensual, participative one. Egalitarianism is a central feature of Type Z organizations. It implies that each person can apply discretion and can work autonomously without close supervision, because they are to be trusted. This feature accounts for the high levels of loyalty and productivity in Type Z organizations.

Similarity in approaches between community design and participatory design, which has its origins in Scandinavia, are equally evident since both stress the importance of the user and the collaborative learning process with designer/planners. Advocates of participatory action research distinguish between research for the people and research by the people, where participatory methods have had parallel developments in such fields as public health, resource management, adult education, rural development, and anthropology (Whyte, 1991). Research is seen not only as a process of creating knowledge, but simultaneously, as education and development of consciousness, and of mobilization for action.

Community participation in design and planning, as a movement, emerged from a growing realization that the mismanagement of the physical environment is a major factor contributing to the social and economic ills of the world and that there are better ways of going about design and planning. Consequently, how to make it possible for people to be involved in shaping and managing their environment is what the community design movement has been exploring over the past few decades. Starting with designers and planners working with, instead of against, community groups, it has grown rapidly to include a new breed of professional in a variety of partnership programs involving the public sector with developers and financial institutions and working closely with the volunteer sector. In such cases, it has become evident that the planning that accompanies the development of any participation program should first include a determination of objectives, which include the participation intended to generate ideas, identify attitudes, disseminate information, measure opinion, resolve some conflict, or review a proposal. Experiences in the participation process show that the main source of user satisfaction is not the degree to which a person's needs have been met, but the feeling of having influenced the decisions. Therefore, the re-emergence of the ideal of a participatory democracy at the national level is effective only if people have been prepared for participation at the local level, such as the workplace and community, since it is at this level that people learn self-governance.

References

- Atlee, T. 2003. The Tao of Democracy: Using Co-Intelligence to Create a World that Works for All. Cranston, RI: The Writers Collective.
- Avery, M. 1981. Building United Judgment: A Handbook for Consensus Decision Making. Madison, WI: The Center for Conflict Resolution.
- Bens, C.K. 1994. Effective Citizen Government: How To Make It Happen. National Civic Review 83(1): 32-38.
- Billington, R.A. 1974. American's Frontier Heritage. New York: Holt, Rinehart and Winston.
- Bodker, K., Kensing, F. and Simonsen, J. 2004. Participatory IT Design: Designing for Business and Workplace Realities. Cambridge, MA: MIT Press.
- Bohman, J.F. 1996. Public Deliberation: Pluralism, Complexity, and Democracy. Cambridge, MA: MIT Press.

- Bryson, J.M. 1988. Strategic Planning for Public and Nonprofit Organizations. San Francisco, CA: Jossey-Bass.
- Cahn, E.S. and Passett, B.A. 1971. Citizen Participation: Effecting Community Change. New York: Praeger.
- Casrson, L. 2003. Building Sustainable Democracies. Paper presented at “Now We Are People Conference”, University of Technology, Sydney, Australia.
- Chekoway, B. 1986. Building Citizen Support for Planning at the Community Level. Interdisciplinary Planning: A Perspective for the Future. New Brunswick, NJ: Center for Urban Policy Research.
- Cohen, J. .1997. Deliberation and Democratic Legitimacy. In J. Bohman and W. Rehg (eds.) Deliberative Democracy: Essays on Reason and Politics. Cambridge, MA: MIT Press.
- Connolly, W.E. 1969. The Bias of Pluralism. New York: Atherton Press.
- Creighton, J. L. 1994. Involving Citizens in Community Decisions Making: A Guidebook. Washington, DC: Program for Community Problem Solving.
- Davidoff, P. 1965. Advocacy and Pluralism in Planning. Journal of the American Institute of Planning 31, 331-338.
- De Toqueville, A. 1959. Democracy in America. New York: Vintage Books.
- Ehn, P. .1992. Scandinavian Design: On Participation and Skill. In P. Adlerand & T. Winograd (eds.) Usability: Turning Technologies into Tools. Oxford: Oxford University Press.
- Fisher, G., Giacardi, E., Eden, H., Sugimoto, M. and Ye, Y. 2005. Beyond binary choices: Integrating individual and social creativity. Human-Computer Studies 6, 482-512.
- Forester, J. 1999. The Deliberative Practitioner: Encouraging Participatory Planning Processes. Cambridge, MA: MIT Press.
- Gastil, J. 2000. By Popular Demand: Revitalizing Representative Democracy Through Deliberative Elections. Berkeley, CA: University of California Press.
- Gove, P. & Merriam-Webster. 1986. Webster’s New International Dictionary. Springfield, MA: Merriam-Webster.
- Guy, B. 2002. Community Design Primer, Environmental Leadership Program. Available at <http://www.elpnet.org>.
- International Association for Public Participation - IAP2. 2006. Available at <http://www.iap2.org/displaycommon.cfm?an=4>
- Lind, A. 1975. The Future of Citizen Participation. The Futurist 316-28.
- King, S. 1983. Co-Design: A Process of Design Participation. New York: Van Nostrand Reinhold.
- Kretzmann, J. P. and McKnight, J. L. 1993. Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community’s Assets. Chicago: ACTA.
- Manzo, L. A. and Pewrkins, D. D. 2006. Finding common ground: The importance of place attachment to community participation and planning. Journal of Planning Literature 20 (4), 336-350.
- Moore, C.N. and Davis, D. 1997. Participation Tools for Better Land-Use Planning. Sacramento, CA: Local Government Commission/Center for Livable Communities.
- Morris, E.W. 1996. Community in Theory and Practice: A Framework for Intellectual Renewal. Journal of Planning Literature 11, 127-150.
- Muldoon, B. 1996. The Heart of Conflict. Putnam Publishing Group.
- Ouchi, W. 1981. Theory Z: How American Business Can Meet the Japanese Challenge. Boston, MA; Addison- Wesley.
- Olsen, M. E. 1982. Participatory Pluralism: Political Participation and Influence in the United States and Sweden. Chicago: Nelson Hall.

- Perkins, D.D. 1995. Speaking Truth to Power: Empowerment Ideology as Social Intervention and Policy. American Journal of Community Psychology 23 (5), 765-794.
- Perkins, D.D., Brown, B.B. and Taylor, R.B. 1996. The Ecology of Empowerment: Predicting Participation in Community Organizations. Journal of Social Issues 52 (1), 85-110.
- PICCED - Pratt Institute Center for Community and Environmental Development. 2000. Available at <http://www.picced.org>
- Plato, and Grube, G.M.A. 1992. Republic. Indianapolis, IN: Hackett Publishing Company.
- Poister, T. H. and Streib, G. 1989. Management Tools in Municipal Government: Trends over the Past Decade. Public Administration Review 49, 244.
- Pranger, R. J. 1968. The Eclipse of Citizenship. New York: Holt Rinehart & Winston.
- PyGyWg. 2006. Participatory Geographies Working Group. Available at <http://www.geog.leeds.ac.uk/research/pygywebsite/about.html>
- Rapoport, A. 1987. Terms of empowerment exemplars of prevention: Towards a theory for community psychology. American Journal of Community Psychology 15, 121-143.
- Reid, J. N. 2000. How People Power Brings Substantial Benefits to Communities. Washington, DC: USDA Rural Development Office, Office of Community Development.
- Rivlin, L. 1987. Group membership and place meanings in an urban neighborhood. Journal of Social Issues 38 (3), 75-93.
- Rosener, J. 1978. Matching Method to Purpose: The Challenges of Planning Citizen Participation Activities. In S. Langton (ed.) Citizen Participation in America. New York: Lexington Books, New York.
- Sanoff, H. 2000. Community Participation Methods in Design and Planning. New York: Wiley.
- _____. 2005. Origins of Community Design. Progressive Planning 166, 14-17.
- Sirianni, C. and Friedland, L. 2005. Deliberative Democracy. Available at <http://www.cpn.org/tools/dictionary/deliberate.html>
- Speer, P.W. and Hughey, J. 1995. Community Organizing: An Ecological Route to Empowerment and Power. American Journal of Community Psychology 23 (5), 729-48.
- Spinuzzi, C. 2005. The Methodology of Participatory Design. Technical Communication 52 (2), 163-174.
- Thomas, R.L., Meins, M.C. and Greive, M.A. 1988. Taking Charge: How Communities are Planning their Futures. Washington, DC: International City Management Association.
- Thomson, K., Berry, J.M. and Portney, K.E. 1994. Kernels of Democracy. Boston, MA: Lincoln Filene Center at Tufts University.
- White, S. A., Nair, K. S. and Ascroft, J. 1994. Participatory Communications: Working for Change and Development. Thousand Oaks, CA: Sage.
- Whyte, W. F. 1991. Participatory Action Research. Newbury Park, CA: Sage.
- Winograd, T. 1996. Bringing Design to Software. Boston, MA: Addison-Wesley.
- Wuld, F. 1986. The Concept of Participation. Design Studies 7, 153-162.

CROSS-CULTURAL PERSPECTIVES TOWARD HISTORIC SACRED PLACES

DANIEL LEVI AND SARA KOCHER

The authors discuss their comparative research that examines California Missions and Thai Buddhist wats as sacred places and their cultural meanings. The conflicts between religious and tourist uses are discussed and their implications for place identity and sacredness as well as for historic preservation and planning.

Within the noisy sprawl of Bangkok, there are islands of tranquility – the Buddhist *wats*. These places of worship are oases within the city; within the gates, the city becomes quiet. The wats are religious places, but they also serve the function of urban parks, community service and educational centers, and tourist sites. The beauty of these sacred places started our research on understanding the design, function, and psychology of these historic sacred sites.

Religious systems from primitive animism to modern religions like Christianity and Buddhism have created or identified sacred places (Jackson & Henrie, 1983). Sacredness has been used to describe a wide variety of types of places (Chidester & Linenthal, 1995). American sacred spaces discussed in the literature include historic sites and monuments, battlefields, churches, cemeteries, memorial museums, National Parks and other natural areas, and even baseball stadiums; however, most people view religious sites as the most sacred.

Historic sacred places help to provide meaning to a culture and a focus for community and religious activities (Bianca, 2001). Identifying these sites and understanding what is important to preserve about them is a vital component of historic and cultural preservation. Sacred sites also have economic value because both tourists and the local community use them (Bremmer, 2006). Managing conflicts between local religious use and tourism is a major concern.

Our research has examined Californian missions and Thai Buddhist *wats*, with methods that include phenomenological observations, interviews with tourists and Thai monks, and surveys of tourists and students. Student participation as researchers and place evaluators has been crucial to this work. This research has allowed us to develop a cross-cultural perspective of sacred places that has implications for planners.

We define sacred places as an experiential phenomenon, a behavior setting, and an aspect of place identity. These three definitions are not mutually exclusive; they are used together to understand why a place is considered sacred and to develop approaches to preserving sacred places. Our approach was developed from a Western, Christian, and anthropological perspective. Studying in Thailand gave us an opportunity to view sacred places from alternative perspectives. Thai Buddhism is a mixture of Theravada Buddhism and Folk Buddhism, which includes traditional religious beliefs (Chandngarm, 2005). In Thailand, both of these belief systems coexist and impact the design and use of historic sacred places.



Daniel Levi, Ph.D. is a professor at the Psychology and Child Development Department.



Sara Kocher, Ph.D. is an environmental planning consultant in San Luis Obispo.

Figure 1
Dan and Sara in front of a Thai temple.



Experiential Definitions of Sacred Places

To most social scientists, sacredness is an experience that arises from people's interactions with a place (Carmichael, Hubert & Reeves, 1994). Like the perception of beauty, sacredness does not exist in the person or in the environment, but rather in the relationship between the two. The experience of sacredness exists only for those who are able to perceive why the place was delineated as sacred by the local culture (Shackley, 2001). Sacred places are designed to promote different types of religious experiences. Christian sacred places are designed to create an experience of awe, while Buddhist sacred places encourage an experience of respect, serenity, and immersion.

In Christian traditions, the experience of sacredness arises from a combination of awe and a religious symbol that helps to interpret its meaning. Awe is related to perceived vastness and the inability to assimilate the experience (Keltner & Haidt, 2003). Awe-inspiring environmental features overwhelm the observer and create a sense of being a small part of a larger, spiritual system. Sacred places use a number of design features to encourage the experience of awe; for example, they often have a prominent center, strong verticalities that are oriented toward the sky, symmetries that demonstrate order and harmony, and a strong boundary between the sacred place and the profane outer world (Brill, 1994).

In Buddhist philosophy, sacredness is primarily a mental state, but the experience is influenced by the characteristics of the place. Thai *wats* are designed to encourage an experience of respect toward the Buddha and his teachings, and the experience of serenity that supports meditation and spiritual development. The experience of serenity is encouraged by the peaceful expression on the Buddha images, which physiologically triggers a relaxation response because humans mirror the emotional expressions of others (Iacoboni, 2009). The complex decorations of the temples create an overwhelming visual display that is perceptually relaxing, similar to the attention restoration response humans have in natural environments (Kaplan, 1995). For the Thai Folk Buddhists, the *wats* encourage an immersion experience that combines spirituality with celebration, which relates to their attitude of respect for spiritual forces.

Behavior Setting Definitions of Sacred Places

Sacred places are behavior settings whose meaning arises from the behaviors that occur there; the uses and religious practices make the place sacred. Sacred places provide meaning, support, and a context for performing religious activities (Rapoport, 1982). The meaningfulness of the place arises from its uses by people, while the place helps to structure the social relationships and activities (Bremer, 2006).

In Christianity, any place where people gather to conduct religious services becomes a sacred place during the religious activities (Bible, Matthew 18:20). In this sense, the church is not a building, but the place where religious activities occur. This idea that sacredness is defined by the use of a place is included in the American Indian Religious Freedom Act of 1978 (Hughes & Swan, 1986). According to the law, sacred areas are places where Native Americans have traditionally performed religious activities.

Figure 2
Wat Chedi Luang, Chiang
Mai, Thailand.



From a Buddhist perspective, the behaviors that define wats include community functions such as education and social services, religious functions such as meditation and religious ceremonies, and places where the Sangha (community of monks) live. The community members who use the *wats*, the monks who live there, and the tourists who visit participate in these activities. The opportunity to observe monks and community members engaging in religious practices is an important part of the experience of sacredness for tourists (Levi & Kocher, 2008).

Sacredness as an Aspect of Place Identity

Sacredness is an aspect of place identity --the meanings and feelings associated with a place by a group of people (Hague, 2005). It can become linked to a place's identity in a variety of ways. It may be viewed as an inherent characteristic of the place because of the presence of spiritual forces: religions can consecrate places to make them sacred; and historic events and artifacts may cause a place to become viewed as sacred.

Many traditional cultures believe that sacredness is directly attached to a place (Bianca, 2001). For example, pantheists believe that the earth in its entirety is sacred and everything that exists is part of an interconnected unity that is divine (Levine, 2007). This view is held by many traditional cultures such as Native Americans, non-theistic religions such as Taoism and certain forms of Buddhism, and environmentalist philosophy. Although traditional cultures may view all of the earth as sacred, they do recognize certain places where the spirit power manifests itself more clearly (Hubert, 1994).

Christian religions declare or consecrate places as sacred (Vukonic,2006). Religious authorities sanctify these places, and they can be deconsecrated through rituals if no longer in use. Both Christians and Buddhists recognize that historic religious sites can become sacred due to an event that occurred there (such as a miracle) or the presence of sacred relics and religious icons. Places may be viewed as sacred or "charged" because of the religious or spiritual symbols presented by the environment (Brill, 1994). These symbols may be culturally determined (i.e. crucifix, Buddha image), or there may be universal spiritual symbols such as archetypes or certain natural features.

Implications

This cross-cultural analysis of historic sacred places has important implications for planners concerned with historic preservation, the maintenance of religious practices and community services, and managing the conflicts between tourism and the local community.

The experiential perspective shows the range of emotional experiences related to sacred places. Sacred places are awe-inspiring; they are serene environments that encourage contemplation and meditation; and they create an attitude of respect toward religious values. Preserving the sense of awe at historic sacred



Figure 3
Buddha sculpture and monk, in the historic town of Sukotai, Thailand.



Figure 4
Ritual offerings in Wat Doi Suthep, Chiang Mai, Thailand.



Figure 5
Tourist use of the plaza
and the San Luis Obispo
Mission. (photo V. del Rio)

places requires preservation of the building and management of its use by tourists. Overcrowding and inappropriate tourist behavior disrupts people's experience of place. Maintaining serenity requires limiting disruptions caused by tourists and managing noise and disruptions from adjacent uses to the site. Respect relates to how the place is interpreted --whether it is presented as a tourist attraction, a historic site, or a religious place-- and informing tourists about culturally appropriate behaviors.

The behavior setting perspective makes clear the importance of preserving both the historic structure and the religious practices in order to maintain the sacredness of the place. Although tourists highly value being able to observe and participate in religious practices, their presence can be disruptive to the local community of religious practitioners. At the California

missions, tourists are often excluded from areas when religious services are occurring, while the Thai Buddhists encourage local and foreign tourists to observe and participate in religious rituals.

Preserving sacredness as part of place identity relates to the continued religious use of a site. When religious practices stop occurring, the place identity shifts from being a sacred to historic place. Tourist interpretation is also a factor. At many California missions, the place is interpreted as a historic site, even when it is still being used for religious services. In Thailand, historic Buddhist *wats* are interpreted as primarily sacred sites and tourists are encouraged to engage in religious rituals and talk about religion with monks. However, the biggest impact on place identity relates to commercialization within and surrounding the historic site. Too much tourist-oriented commercial development transforms the site from a historic sacred place to a tourist attraction.

Conclusion

Historic sacred places are valuable community assets. They help to encourage spiritual growth, provide a focal point for the community, and are an economic attractor due to tourism. A cross-cultural perspective shows the variety of experiences, behaviors, and identities that create sacred places. This perspective helps to identify some of the challenges planners face trying to preserve these important community assets.

References

- Bianca, S. 2001. Resources for sustaining cultural identity. In I. Serageldin, E. Shluger, & J. Martin-Brown (eds.) *Historic and Sacred Sites* (pp 18-21). Washington: World Bank.
- Bremer, T. 2006. Sacred spaces and tourist places. In D. Timothy & D. Olsen (eds.) *Tourism, Religion and Spiritual Journeys* (pp 25-35). New York: Routledge.
- Brill, M. 1994. Archetypes as a "natural language" for place making. In K. Franck & L. Schneekloth (eds.) *Ordering Space: Types in Architecture and Design* (pp. 61-78). New York: Van Nostrand Reinhold.
- Carmichael, D., Hubert, J. & Reeves, B. 1994. Introduction. In D. Carmichael, J. Hubert, B. Reeves, & A. Schanche (eds.) *Sacred Sites, Sacred Places* (pp 1-8). New York: Routledge.

- Chandngarm, S. 2005. Folk Buddhism. Chiang Mai: Mahamakut Buddhist University.
- Chidester, D. & Linenthal, E. 1995. American Sacred Space. Bloomington: Indiana University Press.
- Hague, C. 2005. Planning and place identity. In C. Hague and P. Jenkins (eds.) Place Identity, Participation, and Planning (pp 3-18). New York: Routledge.
- Hubert, J. 1994. Sacred beliefs and beliefs of sacredness. In D. Carmichael, J. Hubert, B. Reeves, & A. Schanche (eds.) Sacred Sites, Sacred Places (pp 9-19). New York: Routledge.
- Hughes, D. & Swan, J. 1986. How much of the earth is sacred? Environmental Review 10 (4), 247-259.
- Iacoboni, M. 2009. Imitation, empathy, and mirror neurons. Annual Review of Psychology 60, 653-670.
- Jackson, R. & Henrie, R. 1983. Perceptions of sacred space. Journal of Cultural Geography 3, 94-107.
- Kaplan, S. 1995. The restorative benefits of nature: Toward an integrative framework. Journal of Environmental Psychology 11, 201-230.
- Keltner, D. & Haidt, J. 2003. Approaching awe: a moral, spiritual, and aesthetic emotion. Cognition and Emotion 17(2), 297-314.
- Levi, D. & Kocher, S. 2008. Authenticity and the tourist experience of heritage religious sites. Journal of Human Sciences 9(2), 72-87.
- Levine, M. 2009. Pantheism. The Stanford Encyclopedia of Philosophy. E. Zalta (ed.). Retrieved at <http://plato.stanford.edu/archives/win2009/entries/pantheism>.
- Rapoport, A. 1982. Sacred places, sacred occasions and sacred environments. Architectural Digest 52 (9/10), 75-82.
- Shackley, M. 2001. Managing Sacred Sites. Padstow, UK: Thomson.
- Vukonic, B. 2006. Sacred places and tourism in the Roman Catholic tradition. In D. Timothy & D. Olsen (eds.) Tourism, Religion and Spiritual Journeys (pp 237-253). New York: Routledge.

FACULTY AND STUDENT WORK



PLACE-MAKING IN CALIFORNIA'S CENTRAL VALLEY: REDESIGNING THE AVENUE 12 CORRIDOR, MADERA COUNTY

VICENTE DEL RIO, CORNELIUS NUMORSOO AND UMUT TOKER



Vicente del Rio, PhD. is Associate Professor at Cal Poly's CRP Department.



Cornelius Nuworsoo, PhD. is Associate Professor at Cal Poly's CRP Department.



Umut Toker, PhD. is Assistant Professor at Cal Poly's CRP Department.

The CRP Department developed a series of studies for the improvement of Avenue 12 in Madera Ranchos under a contract with the Madera County Planning Department. This community-based project included participatory visioning workshops, traffic studies and a transportation plan, and an urban design plan. The final reports were submitted to the county and the community, and the proposals are currently undergoing the public review process prior to adoption.

In 2008 the City and Regional Planning Department was approached by the Madera County Planning Department for the submission of a joint grant proposal to Caltrans. The county needed a plan on how to adapt Avenue 12 --one of the counties' major thoroughfares-- and the community of Madera Ranchos to increasing development and traffic demands in the region, and to a new Caltrans road planned to by-pass the community. Starting in July 2009, CRP's contract with the Madera County Planning Department resulted in the Avenue 12 Corridor Enhancement Project which had three distinct, but interrelated parts: (a) Community Visioning, (b) Transportation Plan, and (c) Corridor Redesign. The purpose of our work was to outline the impacts of the planned by-pass road and the increased traffic demands, to mitigate their impacts, and to present a redesign project for the Avenue 12 corridor which could help Madera Ranchos become a walkable and attractive community with a quality urban design and a strong sense of place.

In the summer of 2009 a visioning process with a series of community workshops in Madera Ranchos was conducted by assistant professor Umut Toker. This process resulted in the Madera Ranchos Vision Plan indicating the community's perceived problems, their needs and desires, as well the community's general ideas for the Avenue 12 Corridor. From the fall of 2009 to the summer of 2010, a series of transportation studies were carried out by associate professor Cornelius Nuworsoo, resulting in the Transportation Plan and a series of scenarios and recommendations. In the spring of 2010 a joint urban design studio with CRP and Landscape Architecture students --led by instructors Vicente del Rio and Vangeli Evangelopoulos-- developed the Avenue 12 Corridor Redesign Plan, encompassing ideas for the street itself as well as for public and private development along it. Finally, in the summer of 2010, final reports and recommendations were put together and submitted to the Madera County Planning Department, and are presently in the process of final approval by the community and the county planners.

Avenue 12 and Madera Ranchos

Avenue 12 is a two-lane country road that lies in the southeastern area of Madera County in the California Central Valley. It connects Highway 99 (SR 99) to the west and Highway 41 (SR 41) to the east and bisects the community of Madera Ranchos, concentrating sparse commercial and service uses. The Madera Ranchos area is a low density, middle income community with approximately 8,000 residents. It is surrounded by agricultural uses and the community's main features are the Madera Ranchos Liberty High School --located in the north-west corner of Road 36 and Avenue 12-- and sparse commercial and service uses along the avenue including a small outdated shopping center. In its present conditions, the two-mile stretch of Avenue 12 crossing the community -the object of our projects- is an unsafe and unattractive thoroughfare for both pedestrians and motorists, and development along it is of low aesthetical quality, very limited in terms of servicing the community, and unattractive to passers-by. There are no recreational opportunities and few places to meet, the community of Madera Ranchos is not memorable, and sense of place is practically nonexistent.

The complete reports for this project are available at: http://www.madera-county.com/rma/planningdept/planning_dept_docs.html

The study area is adjacent to the northwestern boundary of the City of Fresno and serves as a de facto expansion area for the Fresno metropolitan area. There are several projects in the pipeline for new residential and commercial developments both to the east and west of Madera Ranchos, many of which adjoin Avenue 12. The additional vehicle trips associated with these developments are anticipated to severely impact traffic flow on Avenue 12 and on the community. There were no viable alternatives to the private automobile at the time of this study. Thus the need was identified to address transportation alternatives in the plan.

Community Visioning

The community visioning process for Avenue 12 started in Summer 2009. Throughout this process, Cal Poly Visioning Team (Assistant Professor Umut Toker and graduate student assistant Adriana Neal) worked with Madera County Planning Department, their consultants and community members, facilitating the development of a vision plan for the project area. Following a participatory approach, an initial leadership meeting and three community workshops were held.

The process started with a leadership meeting attended by the County Planning staff, Supervisor Frank Bigelow and eleven community members. The objective of this meeting was to gather an understanding of fundamental issues, and ask the participants to contact other community members to encourage participation in the upcoming events. By participating in a “wish poem / have poem” exercise, participants identified their “wishes” for the future of the project area, as well as those features of the project area they were satisfied with. At the end of the meeting the ideas were summarized and participants were asked to invite their fellow community members to attend the forthcoming community workshops.

The following three community workshops were held at the Liberty High School. In Community Workshop 1, participants reviewed the findings from the “wish poem / have poem” exercise of the leadership meeting, and further developed ideas. They also provided information on major destinations in the project area, where they live, and where they most frequently cross Avenue 12. The first workshop ended with a discussion of desired land uses, densities, traffic calming techniques, lighting options and vegetation options for Avenue 12.

The ideas that were generated on Community Workshop 1 informed Cal Poly Visioning Team’s design of four participatory exercises that were used in the Community Workshops 1 and 2. Two exercises focused on land use, density and traffic calming solutions for Avenue 12. The Cal Poly visioning team prepared two posters: one displayed land use and density options and the other displayed traffic calming options; both posters also showed advantages and disadvantages of all options. Participants in both community workshops were asked to prioritize these options by placing dot stickers on their preferences. The next exercise was composed of a survey of vegetation and lighting options for Avenue 12. Cal Poly visioning team developed a survey listing (a) lighting and (b) native vegetation options for the project area, as well as their water consumption implications. Using these instruments, participants in Community Workshops 2 and 3 were able to prioritize their preferences for lighting, trees and shrubs.

Figure 1
Photos taken by residents for the exercise “Things I dislike about Avenue 12...”





Figure 2
Residents participating
in one of the community
workshops, designing
their “ideal Avenue 12”.

Both community workshop finished with a “design your ideal Avenue 12” exercise. After discussing and identifying their land use, density, traffic calming, lighting and vegetation preferences, participants in both workshops were provided with a blank parcel map of the project area, a legend of land use / circulation options, and a set of color markers / pens. Community members then formed discussion teams of five to eight participants and developed plans of their envisioned “ideal” Avenue 12. In both community workshops, following this exercise, participant teams were asked to share their ideas with the group. After these three community workshops the same set of exercises was utilized by the County Planning staff and their consultants in a workshop at a local high school, which was attended by students.

Following the workshops, the Cal Poly visioning team was able to develop a vision plan for the project area. The Madera Ranchos Vision Plan was made available to the public through the County’s planning office as well as their website. It provided a basis for the upcoming phases of the project by summarizing community members’ needs and wishes. The plan document is composed of five main sections: project area inventory and analysis, history of the Madera Ranchos Community and project area, a summary of the participatory process, community participation outcomes, and the vision for Avenue 12. The vision section of the document discusses findings about land use, density, circulation, traffic calming, street lighting and vegetation preferences of community members.

The Transportation Plan

The Avenue 12 Transportation Plan’s major purpose was to outline the most favorable ways to divert the increased traffic around the Madera Ranchos community while still inviting travelers to stop and use the commercial areas. The construction of an express bypass by Caltrans and its impacts on the community formed the foundation for the plan. Results from an extensive analysis of the existing and future transportation system were combined with community visions and the urban design plan to derive a set of recommendations for future transportation improvements along the Avenue 12 corridor and in the general study area. Specific elements addressed in the plan include: a) area-wide roadway improvements; b) Avenue 12 specific roadway improvements; c) public transportation service to and from the Ranchos; d) bicycling and walking facilities in the Madera Ranchos area. The following are the major recommendations contained in the Avenue 12 Corridor Transportation Plan.

Improvements necessary for the area-wide transportation system to function properly under future build conditions include widening on the major east-west routes (Avenue 9, Avenue 12, Avenue 15 and SR 145) (Figure 3). Hand in hand with these improvements will be the need to extend and widen selected north-south roads (Road 33½, Road 36, and Road 39 ½) to create a grid network of major arteries that would enable alternative route choices and distribution of trips for an efficient circulation system. With the construction of the new express bypass, there will be possible geometric configurations of the connecting points with Avenue 12. Depending on funding and growth in traffic, it is conceivable that these connecting points may take on each of these configurations at various points in time. The first is a standard signalized intersection. The second, which is an alternative to the first as an initial treatment, is a roundabout. The third, an upgrade to the first two, is an interchange as in Figure 4.



The circulation plan includes several traffic control measures and redesign features that would foster safety and increase walkability through the Ranchos. Traffic calming along the commercial segment of Avenue 12 through town is to be accomplished with a series of traffic signals or roundabouts and raised crosswalks at strategic locations. Avenue 12's existing right-of-way permits the implementation of new street sections and a network of bicycle paths and lanes to serve the need for both short-distance transportation and recreation. Recommendations in the circulation plan include: two-way and one-way separated bicycle paths shared with pedestrians, on-street bicycle lanes, pedestrian trails, wide sidewalks, bulb-outs, street parking, and pedestrian crossings including raised cross-walks at selected locations (Figure 5).

Concerning public transportation, the plan recommends two forms of fixed route transit for the Madera Ranchos and area residents. One is an upgrade of the limited existing fixed route service that would operate as local service with detours through the Ranchos neighborhoods. The other is express fixed-route service, which should be inserted on the half hour during the morning and afternoon commute periods. Dial-a-ride transit is recommended to supplement fixed-route transit.

The Urban Design Plan

The Avenue 12 Corridor Redesign Plan resulted from a two-quarter long process which started in the spring with instructors Vicente del Rio and Vangeli Evangelopoulo--from the CRP and Landscape Architecture departments respectively--offering a joint urban design studio for students from both departments with the assistance of MCRP graduate student Anthony Kiet. In the summer, the instructors worked on systematizing the studio products, coordinating with the transportation plan, refinishing drawings, editing the text, and putting the final report together.

The Urban Design Joint Studio had 27 students from planning and 12 from landscape architecture. It was an excellent opportunity for an interdisciplinary hands-on project experience within a pedagogical context that replicated real professional life as close as possible: a client, a contract, and a specific product to deliver. The students experienced a

Figure 3
Madera Ranchos, the two-mile stretch of Avenue 12 object of our plans, the location of the future by-pass and of the eastern connection point (see Figure 4).

Figure 4
The third alternative configuration for the connection between Avenue 12 and the by-pass.

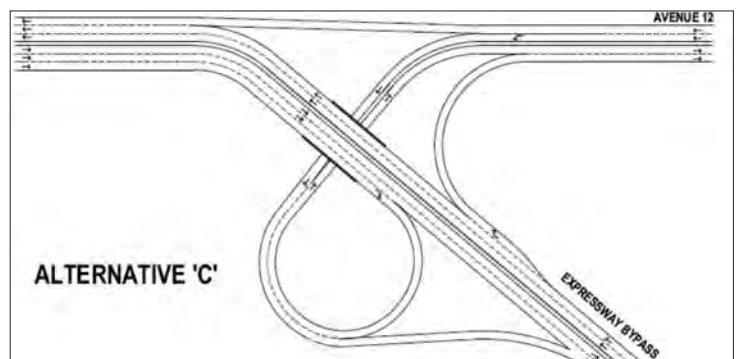




Figure 5
Proposed intersection
looking east along
Avenue 12. Example of
integration between the
transportation and urban
design plans.

design process that started with meeting with the client and understanding the problem, to presenting their proposals to the community in Madera Ranchos.

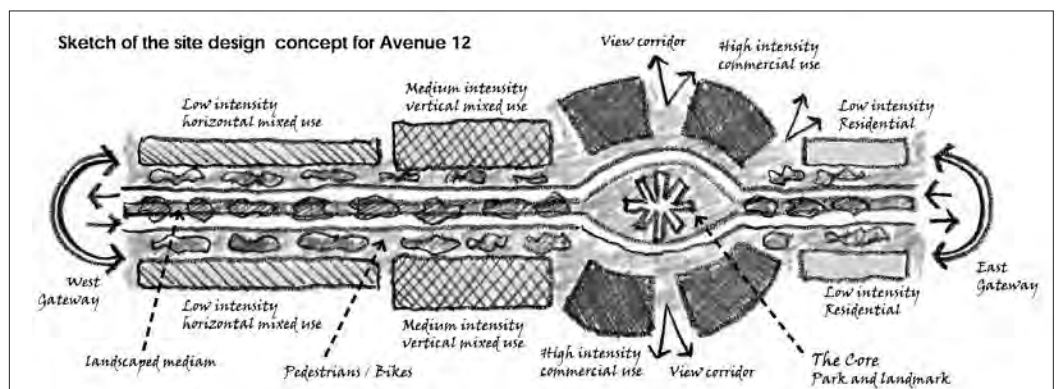
In the project's first phase, the students, divided into small interdisciplinary teams, studied the problem, the background information, and performed a site analysis that included a field visit and a series of observations and studies of Avenue 12 and its surroundings. Students used a pre-defined survey form to record existing development conditions, landscaping and

building features, land uses, maintenance and height of constructions. This data allowed the team to perform a figure-ground type of analysis of the existing development and spatial relationships through a comparison of maps showing building footprints, public and private spaces, vacant lots, and space dedicated to parking and driveways. During the field visit, the students also used a methodology recently developed for the Robert Wood Johnson Foundation to assess five urban design qualities along Avenue 12 (imageability, enclosure, human scale, transparency, and complexity).¹ These qualities are believed to encourage active living, walkability, and sense of place, and our project site scored very low on all of them. The same set of urban design qualities was later adopted by the class as a desired set of general goals and helped orient the design process.

¹ Ewing, E. et al. 2006.
*Identifying and Measuring
Urban Design Qualities
Related to Walkability.*
*Journal of Physical
Activity and Health* 3,
Suppl. 1, S223-S240.

Final inventory and analysis maps as well as a list of constraints and opportunities for development were put together by the students, who made a presentation to the Madera County Planning Department staff and their consultant (RBF). Based on the site analysis, the feedback from the presentation, and inspired by the study of more than thirty case studies, the students developed a concept plan for the Avenue 12 Corridor re-design. In a charrette-like environment, the studio was divided into two large groups who worked in defining two design visions, two sets of goals based on the Urban Design Qualities, two sets of objectives, and a number of design ideas. Two concepts for the redesign of the Avenue 12 Corridor resulted from this process, with short and long term implications, which the class presented to the Madera County Planning Department staff, the consultant (RBF), and other Cal Poly faculty. The comments from the audience helped the class combine both alternatives into one final concept adopted for further development (Figure 6). The final concept included: a) gateways at the

Figure 5
The concept plan for the
Avenue 12 Corridor,
showing the major uses
and the "almond"
roundabout and park
generating a central place.



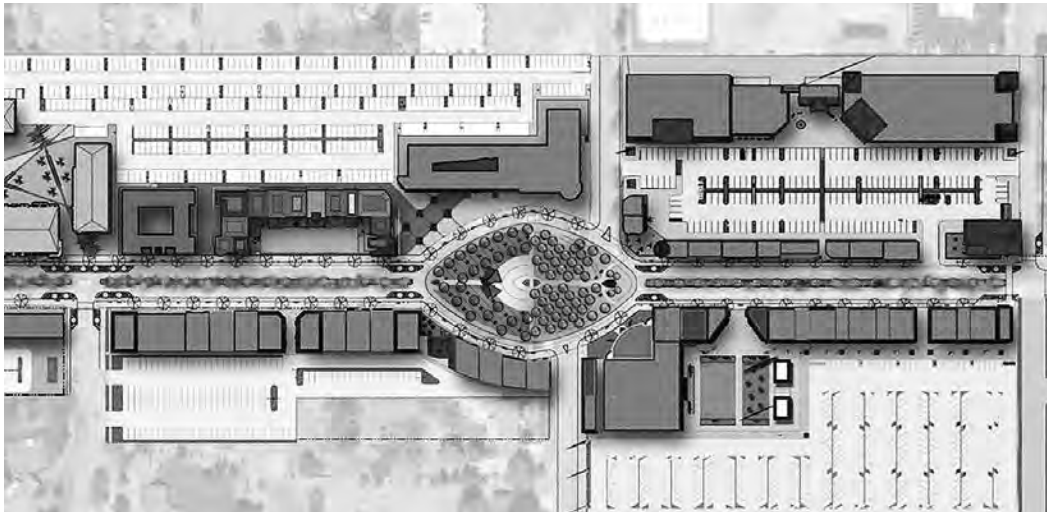


Figure 6
The central commercial core and the Almond Park. Various teams of students designed the park and the projects around it (f.i. Figure 8). Final computer rendering by V. Evangelopoulos. See also front cover illustration.

Madera Ranchos east and west entrances defined by monumentation and by the type/shape of development at the corners; b) concentration of residential use along the east and west portions of Avenue 12; c) generation of a strong commercial core with mixed-uses and a concentration of interesting places to socialize and recreate; d) provision of a central design element as a strong statement and placemaker; e) redesign of the corridor's right-of-way and provision of quality streetscaping in order to enhance safety and encourage walking and biking.

For the last design phase, the class was again subdivided into smaller interdisciplinary teams which developed specific design solutions for Avenue 12 and for the development of the private lots along it. The final Avenue 12 Corridor Redesign Plan envisions a total of 379,557 sq ft of new residential development; 231,047 sq ft of commercial; 50,494 sq ft of offices; 727,155 sq ft of parks; and 53,200 sq ft of public uses. The redesign proposal for the Avenue 12 itself included: a) skinning the corridor to one lane in each direction, providing curb parking and bulb-outs at the corners; b) landscaping, tree planting, seating areas, shared pedestrian and bicycle lanes as well as Class 2 bicycle lanes; wider sidewalks with bulb-outs, bike lanes, raised crossings, tree planting, vegetated medians, etc (see Figure 4); b) the design of a major urban design element, a large roundabout containing the Almond Plaza that will act as an identity giver, a central place for the community, and a traffic calming solution (Figure 6); c) ideas for a signage system and for street furniture and landscaping in public spaces; d) ideas for the development of six different sectors along the Avenue 12 Corridor.

The six design sectors along Avenue 12 (from west to east) are: West Gateway, Suburban Residential West, Community Parks, Commercial, Suburban Residential East, and East Gateway. In the West Gateway, a roundabout with a central monument marks the intersection of Road 36 and Avenue 12, and the two corner lots feature the Community Library with a park and a deli/eatery (Figure 7). The Suburban Residential West Design Sector concentrates single-family residential use, a system of pocket parks, and a few mixed-use as live-work units. In this sector, there is a shared pedestrian-bike path along the north side of Avenue 12 and a pedestrian path along the south side. A gateway at the avenue leads to a proposed 37-acre Community Park with recreational and sports facilities, community gardens, picnic areas, a community center, public restrooms, and a retention pool. A system of pedestrian and bike paths connects the park to the irrigation canal, running along it and looping around Madera Ranchos. The Commercial Core features more intense development with retail, office, department stores, a grocery store, a bank, a movie theatre, a hotel, intensive mixed uses and apartments, a fire station and a post office and a series of small public parks. In this sector, buildings are closer to the lot

fronts to enhance walkability and pedestrian connectivity with land uses (Figure 8). Along the the Commercial Core, Avenue 12 features a vegetated median separating eastbound from westbound vehicular traffic, and Class 1 bike lanes running on north and south sides between the curb parking and the sidewalk proper.

The Suburban Residential East Design Sector is located between the Commercial Core and the canal. The plan keeps the existing single-family housing on the north side of Avenue 12 since it is well consolidated and provides a good transition between Madera Ranchos and the surrounding agricultural land. On the south side, the existing orange grove is partially developed into a residential planned-unit development. Finally, the East Gateway Design Sector consists of several design features that provides the community with another recreational facility, including a lake, and monumentation that will make the community entrance from the east very distinct.

The final report also includes an assessment of the project proposals through the same criteria and methods used to study existing development during the Site Analysis phase. Firstly, the students evaluated their own proposals through the lenses of the same five urban design qualities that define walkability and sense of place, and filled in the same score sheet they used previously. They also produced another series of figure-ground maps and measured the resulting areas. The comparisons between the new maps and scores to those obtained for the existing development, indicate that the Avenue 12 Corridor Redesign Plan will be able to promote a better quality of life in Madera Ranchos and to enhance the community's identity, walkability, safety, aesthetics, and sense of place.



Figure 7

The west-gateway at the intersection of Avenue 12 with Road 36, opposite the Liberty High School. Students E. Gorman, W. Griffith and B. Reyes.



Figure 8

The south-west corner site across the Almond Park features a three-screen movie theatre and retail. Students M. Abselsated, B. Emerzian and K. Kabow.

ARAB CULTURE AND URBAN FORM

ANTHONY KIET

Looking at the evolution of the Arab city from an urban design perspective, Anthony Kiet discusses the cultural impacts of westernization and how they are affecting urban form. He shows us how the Western planning model seems to be contributing to the creation of a modern antithesis of the traditional Arab city.

Current changes in the economic and social conditions throughout the Middle East are more radical now than ever. The region is undergoing transition from traditional economies and societies to one of modern development which has yet to find any real stability. This is most clear and most evident in the field of urban design and planning, for it is the largest and most visible of a community's built forms. Many who have visited or are currently residing in the Middle East can point to the many changes brought about through growth and transition, whether it is in the form of the built environment, the dominance of the automobile in the cities' transportation networks, or the increase in squatter communities and people at the edges of the town.

Much contemporary planning work taking place in the Middle East in recent years has been in the form of new town planning or master planned communities. However, many issues that arise from the growth of these Arab communities can be attributed to planners and designers tasked with the design of these cities without proper knowledge of the region, its constraints, and its culture. The lack of trained town planners and architects can be legitimately considered a contributing cause of the basic mistakes committed in the planning and expansion of most Arab metropolises (Berger, 1974; Shiber, 1974). Local engineers and architects, while knowing the local habits and conditions better than the foreign expert, are not adequately trained to translate their valuable knowledge into urban design and planning. The foreign consultant, though perhaps well trained, is not well versed in local characteristics to effectively produce sound policies and planning solutions.

In this article, I will discuss and analyze the traditional urban form of the Arab city, the impact of culture, and how it has affected the form of the city. I will also discuss the impacts of the Western planning model, which has contributed to creating the modern antithesis of the urban Arab city.

Traditional Urban Form

While historic Arab cities show a variety of origins and growth patterns, they were nonetheless established by a common set of social, geographic, and religious factors leading to similar morphological principles developing the urban fabric (Ben-Hamouche, 2009; Bianca, 2000; Lapidus, 1969; Saqqaf, 1987). In the urban design context, morphology refers to the underlying factors of urban form that draw upon society's attitudes towards and in relation to physical elements and spaces (Franck, 1994). Formally speaking, the Arab City can be seen as an integration of multiple cultures and eras as they came into contact with the Islamic culture, eventually leading to the urban structures and morphological form common in Arab cities today.

Like most cities, the original locations of Arab settlements depended on availability of natural resources such as water supply, locations of existing trade routes, and sometimes on the religious significance of certain places. Many times, it was a combination of these factors and others that contributed to the settlement's site and growth. The holy city of Mecca, for example, was already a trade route before becoming an important pilgrimage site. Medina developed in an oasis for its water supply and continued its growth due to the frankincense trade route. Other cities such as Damascus, Cairo, and Baghdad developed upon strategic geographic location benefitting from water sources and along trade routes as well.



Anthony Kiet holds an architecture degree from Cal Poly and is currently developing his master's thesis in CRP. He works as an urban designer at EDAW/AECON San Francisco.

Note: This paper is based in the author's master's thesis under development at CRP's MCRP program.

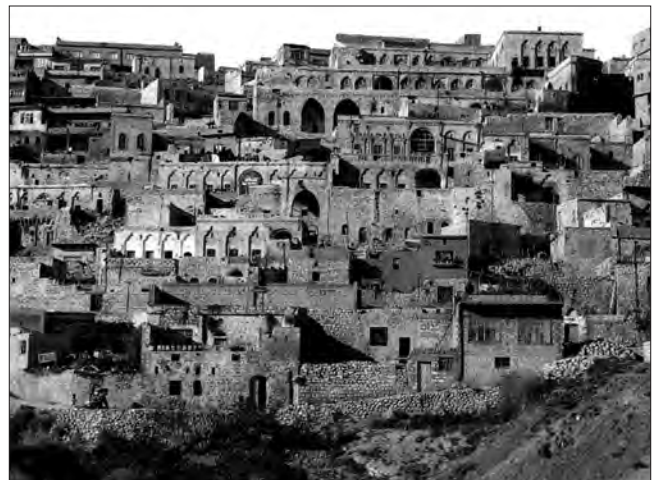
While the origin of the city was dependent on mainly external factors, the Arab city's traditional development pattern was affected by a variety of other factors, one of which is the division of the social hierarchy (Bianca, 2000; Lapidus, 1969). Traditionally, the camps, residences, palaces, and citadels of the ruling class were set apart from the commoners. This would mean that while the larger, more ornate structures were used as landmark structures isolated on the edges of major cities away from the urban center, the buildings associated with the working classes, the local crafts and trade, the mosques and smaller religious institutions, the community facilities, and the common residences were weaved together in the urban fabric.

Another important factor contributing to the growth patterns of Muslim cities are ethnic migrations (Saqqaf, 1987). As these migrations occurred, it led to the development of separate town units, or suburbs, slowly connecting themselves to the urban center starting at the main gates and growing along the major traffic routes outside the city. Cities such as Aleppo or Damascus demonstrate this informal growth pattern with their suburbs extending well past the walled city limits. Accordingly, as cities began to grow, community centers began to shift while older areas of the city became abandoned and newer communities developed.

According to Lapidus, traditional Arab settlements developed in two distinct ways: either "planned" or "spontaneous" urban patterns. The former growth pattern is generally defined by the formal layout of palace cities in response to military concepts and representations of power and royalty. These development patterns are not as common in the typical Muslim city as the latter growth pattern. Because most Muslim cities were guided by the culture and social order of Islam, they developed in a more organic or spontaneous manner characterized by private communities and social groups. Rather than being designed by a formal plan, the Arab city vernacular grew according to the needs of the populace (Ben-Hamouche, 2009).

Starting at the center of the city, the main land-use pattern as described by Bianca focuses on the "multifunctional core structure enveloping or at least partially surrounding the central mosque by different layers of interconnected souks (the typical form of Arab shops and markets)" (Bianca, 2000: 143). Interconnected within are commercial facilities in the form of caravanserais, other civic and educational buildings, and other religious and social structures. Together, the congregation of facilities and structures create a massive mosque complex with only the minaret and large dome of the mosque creating a break in the roofscape. The central courtyard of the complex becomes the primary public open space of the complex and sometimes for the city as a whole. As the grand mosque becomes the center structure of the city surrounded by the markets, the circulation system

Figures 1 & 2
Traditional Arab urban form in the cities of Mardin and Aleppo, Syria.
 (source: www.wayfaring.info/index.php?s=syria)



of the souks becomes the primary access of the central complex, often with multiple entry gates on each side. Multiple other smaller open spaces located off the main pathways created by the caravanserai and smaller religious facilities become specialized public areas with distinct social functions balancing the community needs (Shiber, 1974).

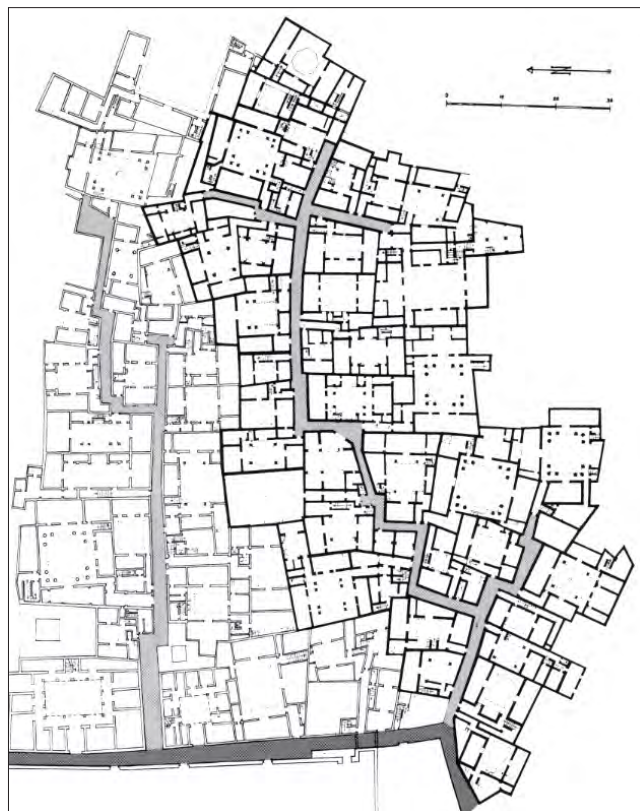
Visually, the central mosque and accompanying facilities appear as a singular structure, and yet experientially, the center of the complex is divided by social behavior and architectural cues. Architectural details such as gateways, passages, thresholds, and detailed doorways indicate a change in function, and subtle cues in spatial patterns indicate a change in accepted social behaviors. Throughout this center, the visitor experiences a set of interconnected and separate spaces yet a homogenous urban whole.

Connecting the central facility to the remainder of the town are a number of main roads acting as spines running down to the outer walls and to the exterior of the city. Each of the spines are lined with shops that frame the pedestrian pathways and take advantage of all potential clients as they walk through the community. A secondary function of these spines, besides connecting the central mosque to the outer rings of the city, is to serve as “protective shields” (Bianca, 2000: 148) hiding the residential districts from intrusion. At the crossroads of the main spines are intersecting narrow alleyways, marked by small gates, indicating the entrances of residential districts. These passages indicate the filtering of the flow of people as the public sphere turns to the private sphere managing the sacred spaces of domestic Arab life in the city.

The residential quarters made up most of the remainder of the city, growing from the space left between the main pedestrian spines and the city center. Social class dictated the growth patterns starting at the center. The most prestigious and wealthy families lived in the compounds closest to the central mosque while those of the working class settled closer to the periphery. Nearest the outer wall, the remaining open space was used as agricultural land providing food and sustenance to the city. In addition, some of the land was used for cemeteries, local crafts, or residential expansions. Subject to the Islamic culture, however, was the rule that unowned land had the status of dead land. This principle allowed residents to develop and own the land as they saw fit. As a result, as housing units expanded, open space was taken over by surrounding domiciles reducing the agricultural land supply but increasing the residential stock. Likewise, as the city grew and expanded, the outer walls were shifted outward at each stage of growth to provide more space for more people.

Residential units themselves developed according to a set of principles dictating the form and morphology of the surrounding neighborhood. As described by Ben-Hamouche (2009), one such principle, the right of precedence, is considered priority when developing between neighbors and other families. Due to the importance of privacy, when one home locates openings facing a certain alleyway or pathway, the opposite property cannot locate an opening facing the same side. Consequently, the building process required complex site designs resulting in the organic organization of interlocking residential units developing the complex form of the urban fabric. In addition, any overhead space along paths and

Figure 3
A traditional residential cluster in Fez containing a variety of self contained courtyard houses and alleyway circulation. (source: Bianca, 2000)



streets were subject to appropriations by residents for the expansion of their homes. The following of this idea led to encroachments on streets, cantilevered segments of structures, projections into the public sphere such as other rooms and lattice structures on windows and openings for privacy called *mushrabiyas*.

The residential unit is also subject to a system of subdivision, further increasing the complexity of the urban form. This arises mainly due to the Islamic law of inheritance and the conditions associated with the division and sharing of a preexisting unit (Ibnu al-Rami, 1995). As the residential unit fragmented into smaller parts, new components were often added such as corridors, staircases, doors, and windows. Although common public facilities would remain intact, open spaces such as larger courtyards were divided into smaller ones, and buildings would be set back to accommodate easements to allow for new passageways creating constant changes in the morphology of the residential areas.

Although subdivisions occurred regularly, additions were much more common, allowing for expansion of the existing city framework. As mentioned prior, residential units often formed their own neighborhoods as they grew in size and created their own social unit (Lapidus, 1969). As such, each neighborhood controlled their own public facilities, such as a local mosque, one or more schools, and public courtyards and fountains. In most cases, each neighborhood was defined at the perimeter by the set of contiguous outer walls of the group of houses laid out around a shared dead-end alleyway. At the alleyway's opening would be a small gate controlled by the owners to control the flow of people into the private space. Viewed together with other small neighborhoods and residential clusters, it formed a larger neighborhood unit complete with their own open spaces, shared facilities, and interior circulation system connected to the urban fabric by the larger pedestrian pathways and spines.

The morphology of the Arab City is created by a repetition of cellular residential blocks and clusters at multiple scales. As each cell interconnects and is overlaid onto another residential cluster, the urban fabric becomes a system of hierarchical elements of various sized cells creating a complex pattern of unity and homogeneity. This becomes increasingly apparent as the units and subunits of the city are seen in a comprehensive fashion relative to their own architectural intent. Interestingly, as the scale increases, the division of individual units is blurred, allowing the architecture to read differently at different scales. The fact that each component of the Arab City shared the same structural principles made them completely compatible. Due to the nature of the courtyards and open spaces, connection, expansion, and integration were possible at any stage of development, allowing for maximum flexibility. While differentiation occurred in use, the form was almost completely homogenous, organized by the system of open spaces, courtyards, and circulation patterns present at every scale. In this instance, even potentially conflicting uses can be placed side by side, integrated into a single comprehensive and cohesive urban fabric.

As noted by Lapidus (1969), the morphology of the urban city becomes a breathing, organic structure fundamentally different from the sterile uniformity of replication and capable of multiplying without ever losing its essential qualities. The smallest elements are capable of representing the structure of the urban whole. Each element communicates the consistent language of form and function. Each of the city's units can stand on its own giving the user the impression of always being in the center of things, regardless of the size or scale of the structure or neighborhood.

Modern Urban Form

In the nineteenth century, industrialization had a delayed but massive impact on Muslim society (Bianca, 2000; Lapidus, 1969), much of which was transmitted through Europe's colonial expansion and development. It was

during this time that Europe developed the tools and leverage needed to impose its supremacy and sustain its colonization into other continents beyond the adjacent and easily accessible coastlines. By 1920, large parts of the world were under European influence. However, largely due to the strength of the Ottoman Empire, most of the Islamic world, including the Middle East, was able to escape the European colonization of the nineteenth century. On the other hand, through Turkey the Ottoman Empire acted as a filter and transmitter of Western influences, which led to the beginning of the “westernization” of Ottoman architecture.

At this point in time, the western model was largely recognized as Modernism, and as such, the westernization that occurred followed the Modern Movement and its ideals. Started by Loos, Gropius, van der Rohe, Le Corbusier, and others, the Modern Movement was a reaction against social injustice and the architectural style of early nineteenth century Europe, attempting to camouflage new building typologies of the industrial age by a revival of historic styles. However, as the architectural features merely mimicked past styles and expressions, it lacked truth and relevance, and the designs were not supported by the traditions and culture. The Modern Movement’s architectural forms had rejected the expression of cultural identity in exchange for functionalism and rational efficiency (Shiber, 1974).

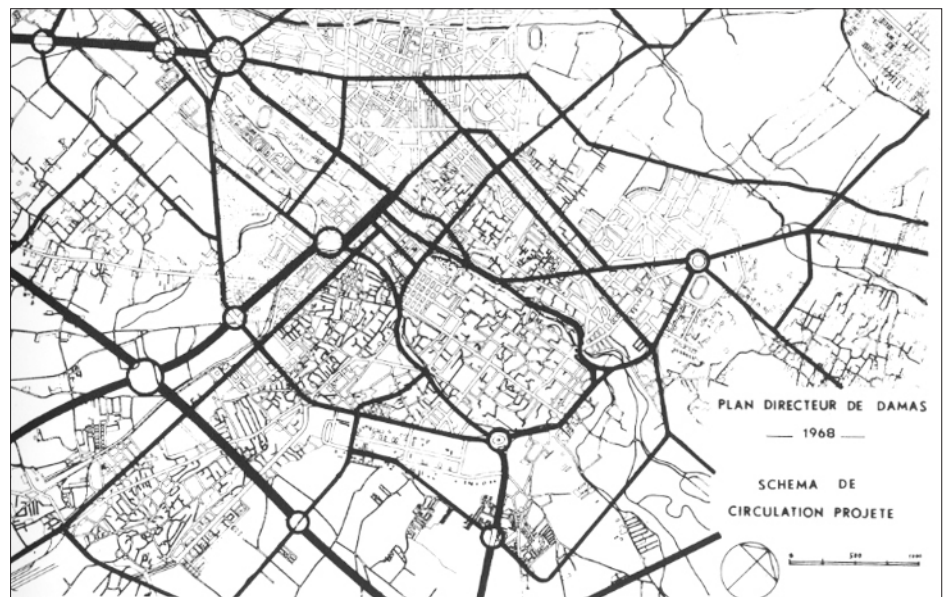
In many areas of the Arab world, it was evident that “westernization” had taken place. Features of classical and rococo architecture were prevalent in Istanbul, and Western-type apartment houses distinctly lined the streets of new districts. As the Ottoman Empire’s reign continued, important capitals such as Aleppo, Damascus, and Baghdad established new Western-style municipalities to plan urban developments (Saqqaf, 1987). Architects from France and Italy were commissioned to design important buildings and urban projects. Streets were designed in the European colonial style screening the traditional urban fabric, usually about three stories, not high enough to exceed the pre-established domestic architecture behind. In larger cities, medieval walls were torn down to make way for new residential suburban development, reminiscent of Western colonial administrations.

One of the most drastic transformations of an Islamic City happened in Cairo (Lapidus, 1969). Heavily influenced by the designs and schemes of Haussmann after a visit to Paris in 1867 for the World Fair, Muhammad Ali and his followers adopted the French plans and model. Similar to Haussmann’s schemes, Ali’s successors designed a

new town plan on vacant land southwest of Cairo. Several new axes extended from the new city center into the old city center, cutting through the historic fabric with little regard to the physical, social, and economic impacts of the corridor development. Not only did this disturb the traditional city, but it also caused a rift in the social structure, with those more privileged choosing to live in the Westernized environment while the rest lived in the historic city. This, in essence, was the beginning of the stigmatization of the historic city as a lower social class neighborhood (Bianca, 2000).

After the fall of the Ottoman Empire, the next stage of Westernization began with

Figure 4
Master Plan of Damascus in 1968 influenced by western-style circulation planning. (source: City of Damascus)



even greater influence. Without the strength of the former Empire, the Middle East was opened up to political influence by Western nations resulting in a number of developments within and around cities following the Western model. By the end of the second World War, the Western superpowers emerged in the dominant positions of economic, financial, and technological supremacy. Although this was the case, the period of European colonialism and imperialism within the Arab world had all but disappeared as individual countries struggled for independence. But, even with political independence, the effects of the Western model were already firmly established through their now existing governmental structures and procedures. Economic patterns set by industrialization were designed to exist and interact with Western technology. With the growth of the Western style businesses and professions in Middle Eastern cities, physical growth began to resemble the American “central business district” (Gulick, 1969). Living conditions, prestige, and education were all based upon the standards of the Western world. It is during this period that the differences between the East and the West began to fade, and the Muslim world and its traditional and cultural ideas began to integrate with the modern ones.

While ideas were integrating, the urban form remained divided based on cultural and societal differences. Cultural identity stayed in the historic city centers with the lower social classes, while the new Western practices of town planning and development became the planning style of the bourgeoisie. Issues identified by the higher social classes for abandoning the traditional city and way of life included poor accessibility, lack of services, badly maintained facilities, overdensification, poor economic conditions, and dilapidation of the housing stock (Saqqaf, 1987). The result of this mass exodus of the population is further demolition and neglect of traditional historic centers.

At this time, two types of urban planning and intervention emerged. The first was the superimposing of the new cities onto the older historic fabric by cutting out new roads and sites for major public buildings--an approach that required the demolition of the historic fabric and buildings. The ancient cities of Aleppo and Damascus represent the first style of planning. In both cases, the new city was developed adjacent to the historic center and, due to growth, extended their traffic spines and new roads through the old city cutting across the historic fabric. The second approach was to develop new cities on new land without interacting with the pre-existing cities and structures. An example of the second approach is the city of Fez. The new city of Fez was planned upstream from the historic center atop a plateau. Although it was constructed with one of its major avenues pointing into the old city, the architects took care in preserving the integrity of the original settlement. The new city was able to develop and expand without infringing upon the historic urban fabric.

Differences Between Traditional Islamic and Modern Western Planning

In the Muslim world, the traditional Islamic planning methods provide a sense of culture and community, while at the same time, the Western system contradicts these vernacular customs and beliefs but brings about efficiency and rational development. The problem that arises, then, is the appropriate integration of the two methods to form a contemporary solution. The need is a viable blend between the Islamic cultural paradigm and modern technological progressive development. To ascertain the assimilation requires the correct values and objectives that will guide the planning and design process, that is, an awareness of local culture and traditions applied to the scientific, technical, and architectural tools used by modern development to favor the synthesis of these two planning methods. The differences, however, in the concepts of development, community, aesthetics, planning, land use, circulation, urban form, and architectural form are great and require further examination to understand the future of planning in the Arab city (Ben-Hamouche, 2009; Berger, 1974; Bianca, 2000; Lapidus, 1969; Roberts, 1979; Saqqaf, 1987).

The Western thoughts of development, stemming from the ideas of the Industrial Revolution, were the concepts of efficiency and progress. From this, development was considered successful if it was represented by linear development patterns, a by-product of the goal of efficiency. The result of this single-minded intent includes not only the neglect of geographical conditions but also the degradation of the environment, including the rapid depletion of natural resources in the name of progress (Issawi, 1969). In keeping with the logic of the rational development concept, modern institutions have divided traditional social units into more functional components to fit into an idealized plan. The new structures, then, tend to be highly artificial and never attain the life and character of the organically grown urban form. This modernization of the traditional neighborhoods results in a destruction of existing informal community networks as well.

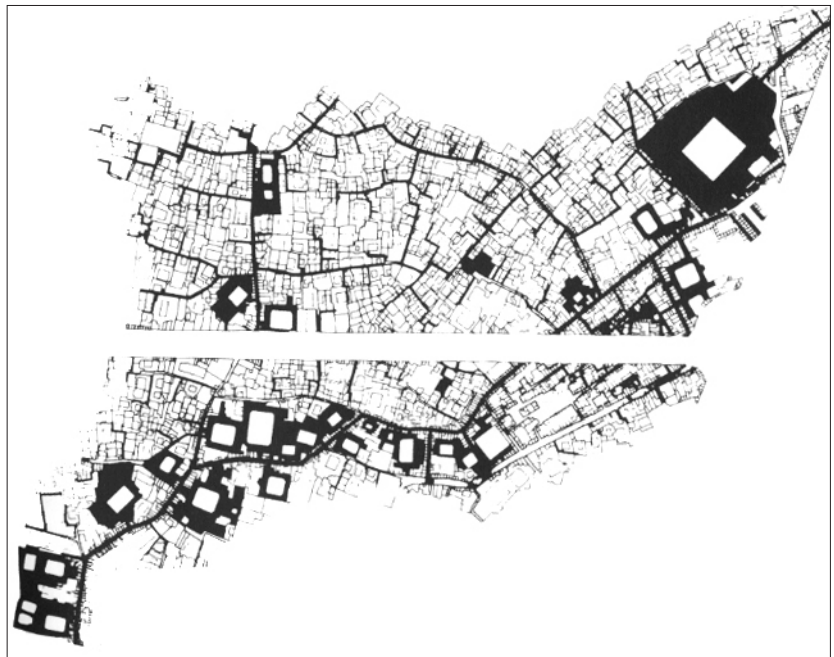


Figure 5
A new road in Isfahan cutting through the cellular tissue of the old city and the main souk spine.
(source: Bianca, 2000)

“While modern planning is often seen as a miraculous instant solution to arising development patterns in the Third World, it appears to be even less viable there than in the Western context” (Bianca, 2000). The problem with the Western model in the Muslim world is its assumption that it can predict for the needs of the future with precision leaving little room for change and adaptation. Conventional master plans have been applied all over the Arab countries with differing results as it fails to take into account the social relationships of its human resources with its built environment. These plans tend not to adapt to the local customs and as a result, create conflicts with traditional social convention. One such area of contention is the impacts on residential development. Street plans and architectural buildings are often designed modeled after the Western model focusing much attention to the street, however, many of these designs violate the Islamic concept of privacy and neighborhood and inadvertently destroy the existing community structure.

The Western planning approach, as described by Ben-Hamouche (2009), lacks the flexibility to interact with day-to-day decisions made by governmental agencies and private land owners. It is these personal decisions that are one of the strengths of traditional Islamic planning. The ideas of community and social consensus created by the community were mechanisms that allowed for flexible planning. These social constraints allowed individuals to contribute to the organic whole through single buildings and added elements. There was no predetermined scheme that defined future development in a rigid pattern. Regardless, the societal infrastructure ensured a balance between the growth of each cellular unit at any level of the urban form. Planning was determined by the consultation of neighbors and the interest of the community. The contrast between the traditional Arab city and the modern Arab city is evidenced in the visual appearance of their respective urban forms. The first has produced a distinct type of organic order whereby each individual unit contributes to and enhances the vitality and unity of the urban form. The second has produced a sense of uniformity but is unable to attain a lively urban form, likely due to its rigid constraints and focus on comprehensive planning.

Western master plans also differ from traditional development in terms of its separation of functions, designating specified areas for housing, commerce, civic use, industrial use, and recreation. The purpose of this kind of

planning is to divide the city into sectoral components to create a more efficient and rational urban system rather than accommodate the human needs and social considerations of the populace. Streets that are too wide and highway and road systems that bisect neighborhoods (or even parts of the cities) are then introduced to try to remedy the disconnected zoning districts further cutting into the social fabric and isolating pieces of the urban form. As stated by Ben-Hamouche (2009) and Bianca (2000), the division of uses does impart functional improvements, but at the consequence of losing many human and environmental qualities. The traditional Muslim plan for neighborhoods was always based on the principle of creating integrated sub-units. In other words, each of these parts could sustain itself as a whole in and of itself.

The traditional city was subdivided, but it was organized in a way that would allow each cellular unit to operate on its own or as a component of the comprehensive urban system. One of these guiding mechanisms was the separation of public and private uses. By placing great concern on both the public realm and privacy in residential quarters, the functions of the city were easily separated, but did not result in a disruption of the urban fabric because it allowed for clustering of uses based on social need. In Muslim cities, the incomplete application of Western concepts in modern planning without understanding of traditional concepts has led to a disintegrated urban fabric. In residential areas, a separation of society based on economic and functional criteria has led to the deterioration of the social unit. In the central business districts, mosques are designed as freestanding landmarks, isolated from the physical and social urban context, ignoring the possibilities of uses as community gathering facilities. A proper understanding of cultural and social context is needed to physically integrate these two planning models. For this to happen, the structure and form of Arab land use and planning must be learned.

The street system, as a major component of planning and urban design, is also a very important source of divergence between the traditional and Western models. The traditional Muslim city was built at a pedestrian scale and, as such, was an extremely dense cityscape with a very high degree of complexity. Streets were considered secondary to the architectural framework and often appeared only as narrow internal corridors. Main thoroughfares were integrated into souks, secondary corridors into residential neighborhoods, and alleyways into the clusters of private homes. The sequence established a clear hierarchy and punctuated changes through transition, and with it, changes in social behavior and norms (Zeisel, 1981). The circulation system ensured that the network matched the character of the space and the social needs of the users. Instead of merely dividing up spaces, the circulation system worked to connect and interrelate the various components of the urban fabric.

Modern planning, however, takes a wholly different approach to the circulation network. Major axial roads are drawn, cutting into the organic urban fabric and dividing the existing comprehensive system into separated

Figure 6
Modern master planned city of Dubai utilizing Westernized ideals of planning and design.
(source: www.robertsday.com.au/cr_waterfront.html)



blocks. These streets disrupt the existing social blocks and divide residential neighborhoods exposing them to the public realm. In addition, applying the Western model to a preexisting settlement affects the social and spatial qualities of the traditional environment. While circulation is improved, widened roads and streetscapes are designed with the intention of enhancing important civic structures such as mosques and sanctuaries, unintentionally separating the public buildings from the urban fabric and isolating them as individual buildings. Modern circulation pathways in the traditional city also serve as redevelopment opportunities catering to the new vehicular access channels. While these infrastructure improvements are needed to revitalize and rehabilitate old cities, modern buildings that come from such developments often do not possess the same aesthetic qualities or contextual properties necessary for the environment. These buildings lack the same physical and functional qualities that allow them to become part of the cellular whole. Application of the modern planning approach, though, is still possible. With better understanding of the traditional infrastructure and the qualities inherent in the existing system, improved accessibility can be achieved without the cost of contextual destruction.

The concepts of urban form between the traditional urban form and the modern urban form have, in addition, a very important underlying difference. While the Western model follows a quantitative subdivision approach in land management creating smaller fragments of space from a larger space, the concept of urban form in a traditional Arab city is governed by an incremental and organic additive formation of parts. These small sub-units are then connected together forming the larger cellular units that create the structure and tissue of the city. The multiplication and addition of units is the basis of the generating principle in the city's traditional urban form. Open space in the form of courtyards and circulation systems, instead of being parsed out, are integrated within the system. Each element of the urban fabric is developed according to the needs of the population and tailored to the human activities taking place in the community. Because of this growth pattern, every component is significant and is not created merely because there is space. The question now, as posed by Issawi (1969), is how to sustain such urban form qualities and how to integrate them into a contemporary design language.

Differences between traditional and modern approaches to architectural form have been discussed throughout this article, but it bears another mention to fully grasp the contrast in formal qualities. Much of the modern architecture designed for the contemporary city tends to be buildings isolated in an emptied urban space lacking the essential cultural qualities that made it correspond to the community. In addition, many structures are reduced to a repetitive grid pattern and mirror the Western subdivision practices of homes and buildings lacking any cultural identity. As mentioned previously, traditional Arab residences and architecture is conceived not as detached objects, but shaped according to the needs of the users. The design and layout of the building matches the location in which it was developed and with it the ability to integrate into the existing urban fabric. The building itself is an interior focused space, very different from the idea of Western architecture where the dominant features are seen from the exterior. Street elevations are of little importance in the Muslim world as the architecture's spatial qualities are to be experienced inside. Architecture of

Figure 7
The Heart of Doha, Qatar, a project by AECOM utilizes the existing city fabric as a precedent and incorporates sustainable strategies and design standards for a new city center. (source: AECOM Technology)



the Western world on the other hand is fundamentally different in regards to access, street orientation, and contextual aesthetics. To be able to fully fit within the urban context, new architectural models of development need to be established.

Final Remarks: Integrating Tradition and Modernity

The ultimate objective of the present analysis is to suggest how to bridge the gap between the differences of the East and the West, past and present, or traditional planning and contemporary planning. The only way to do this is by understanding and applying the essential values of the local tradition with Western technology and architectural concepts with regards to their underlying ideologies and social implications. This integration will need to adapt to meet the needs of contemporary Arab cities but still retain cultural continuity between the needs of social society and progressive planning. These fundamental issues can only be resolved by dialogue and shared values between all parties involved and strong participation from local voices. In addition, every situation can hardly be resolved by a generalized answer. The dynamic nature of the urban form can hardly be accommodated by either of the extreme conditions presented but should be responded to in a meaningful and appropriate manner, maintaining, adapting or reinterpreting traditional structures where possible, and developing new structures for emerging needs. Reinterpretation of tradition based on modern needs may be necessary, but should remain faithful to traditional typological and morphological principles and follow cultural and urban continuity.

References

- Berger, Morroe (ed.). 1975. The New Metropolis in the Arab World. New York: Octagon Books.
- Bianca, Stefano. 2000. Urban Form in the Arab World: Past and Present. New York: Thames & Hudson.
- Gulick, John. 1969. Village and City: Cultural Continuities in Twentieth Century Middle Eastern Cultures. In Middle Eastern Cities edited by Lapidus. Berkeley and Los Angeles. University of California Press.
- Franck, Karen. 1994. Types are Us. In K. Franck & L. Schneekloth (eds) Ordering Space: Types in Architecture and Design. Portland: Wiley & Sons.
- Issawi, Charles. 1969. Economic Change and Urbanization in the Middle East. In I. Lapidus (ed) Middle Eastern Cities. Berkeley: University of California Press.
- Lapidus, Ira M. 1969. Middle Eastern Cities. Berkeley: University of California Press.
- Roberts, Hugh. 1979. An Urban Profile of The Middle East. New York: St. Martin's Press.
- Saqqaf, Abdulaziz Y. 1987. The Middle East City. New York: Paragon House.
- Shiber, Saba G. 1969. Recent Arab City Growth. Kuwait, Saudi Arabia: Kuwait Government Printing Press.
- Zeisel, John. 1981. Inquiry by Design. Monterey, CA: Brooks/Cole Publishing Co.

THE RAILROADS AND SAN LUIS OBISPO'S URBAN FORM

HEMALATA DANDEKAR AND ADRIANNA JORDAN

The Pacific Coast narrow gauge and Southern Pacific standard gauge railroads affected the economy of San Luis Obispo and shaped city growth and morphology. This essay traces this imprint, celebrates the historic role of the railroads on the city and region, and, speculates on the future potential of fixed rail transportation for economy development.

Today the sound of a train passing through San Luis Obispo may be intermittent and faint, but persistent nonetheless, a reminder that the railroad was a significant force in the development of the City of San Luis Obispo. The railroad's continued presence in the city, cutting through its urban fabric, raises intriguing questions as to what constructive role it can play in the evolving economy of the city. Can the railroad make a contribution to the new economy of the 21st Century? And if so, how? These questions are worth considering beyond nostalgia for a railroad-dominated past as we become more concerned, nationally and especially so in the State of California, about living sustainably. The aspiration to create communities that reduce dependence and expenditure on the automobile has surfaced as an important goal, one that might enable us to live within our resource base. In this emerging context what role will, and might, the railroad play in shaping future developments and influencing land use?

The historical role of railroads in the growth of the City of San Luis Obispo was substantial. San Luis Obispo emerged as a small town centered on a mission established in 1772 by the Franciscan Fathers. An 1872 map of the town of San Luis Obispo (Figure 1) reveals that the Catholic Mission Church's orchards and lands around Broad, Chorro, and Monterrey streets are a dominant part of the town, and encircled by individual land holdings. Set in the rich farming lands of what is now referred to as the Central Coast region, the town of San Luis Obispo was a regional hub of civic and economic activity adding value to production in the immediate hinterland. However, it remained isolated from the rest of the state until advances in transportation technology rendered it a staging ground for people and freight movement between Los Angeles and San Francisco. The Pacific Coast Railway and, later, the Southern Pacific Railroad, were such transportation catalysts, serving to significantly reshape the morphology of the city.

The Pacific Coast Railroad and Regional Trade

Prior to the 1850's the main way to transport people and goods in to the Central Coast region was by horseback, stagecoach, or wagon. Then, in 1855, Cave Landing was founded at Avila Beach just south of the current Avila Pier with a small wharf, warehouse, and derrick. This facilitated an increase in transportation via steamships, which plied up and down the coast from Seattle to San Diego. The majority of goods arriving at Cave Landing originated in San Francisco and included building materials such as redwood and iron, coal, linens, and general household merchandise. Local exports reflected the ranching and agricultural focus of the community and commonly included asphalt and bitumen, ore, hides, tallow, grains, beans, sheep, cattle, hogs, and dairy products.

Fourteen years later, in 1869, John Harford founded the competing People's Wharf at Avila. However, by 1873, after seeking a more sheltered location, he purchased one and one-quarter miles of waterfront property from the Avila family and built a new wharf named



Hemalata C. Dandekar, PhD, is professor and head of Cal Poly's CRP Department.



Adrianna Jordan, BSc in Architecture (University of Michigan) received her joint MCRP/MSc in Transportation from Cal Poly and currently works for Caltrans.

Figure 1
San Luis Obispo 1872 Harris Ward. (courtesy of the History Center, San Luis Obispo County)





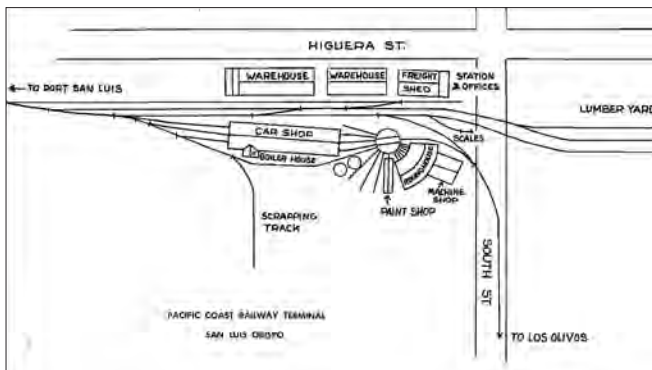
Figures 2 a & b
Map showing the 30-inch gauge Horse Railroad (1876) and 36-inch Narrow Gauge Railroad at Avila (source: Best, 1964, p.13). Port Harford with steamer Santa Rosa and a train at Hotel Marre. (source: Best, 1964, p. 16)

Port Harford in the lee, wind-protected side of Point San Luis (Figure 2). The wharf reached 540 feet out from the rocky shore to water averaging fifteen feet deep. Using light 15-pound steel rail, he built a 30-inch gauge railroad connecting the wharf to the mouth of the San Luis Creek, making it one of the first narrow gauge railroads in the state (Best, 1964). Until 1876 this railroad was horse-powered. Flat cars were loaded with goods from the steamships and “then driven up an incline to a tunnel at which point the horses were unhitched and the railroad cars rolled down the easterly incline to the town of Avila and Harford’s warehouse” (Parsons, 1995, p. 4).

After three years of using this labor-intensive horsepower to move goods along fixed rails, in 1876 a competing company, to be later renamed the Pacific Coast S.S. Co., bought out John Harford, re-graded and re-located the railway alignment closer to the water to avoid the tunnel, and constructed a 36-inch narrow-gauge track that was both suitable for the first steam engine and could efficiently traverse the rugged terrain of the Irish Hills (Best, 1964). The Pacific Coast Company extended the railroad tracks from Port Harford to a new rail-complex in San Luis Obispo. Consisting of a passenger terminal, rail freight yards, and lumber yards, the rail complex was located south of the intersection of Higuera and South Streets in San Luis Obispo (Figure 3). This site is now occupied by the *Pacific Coast Center* office and shopping complex. According to former City of San Luis Obispo Senior Planner and railroad enthusiast Jeff Hook, the foundation of this complex is constructed of brick from the original Pacific Coast Railway passenger terminal, and the form and contours of that terminal are reflected in the center’s “railroad vernacular” architecture. The establishment of this first narrow-gauge railroad in 1876 between Port Harford (present-day Port San Luis) and San Luis Obispo opened up the land-locked economy of this region to trans-shipment of regional products by sea, north to San Francisco.

Figure 3 a & b
Pacific Coast Railway station at the corner of Higuera and South streets. (source: Best, 1964)

Most of the laborers who worked on laying the track extension between Avila and San Luis Obispo were Chinese immigrants recruited by Ah Louis, an early entrepreneur, leader in the Chinese community, and



founder of a family and that is now a member of the establishment in San Luis Obispo (Nicholson, 1980). Ah Louis also ran a merchandise store at the corner of Chorro Street and Palm Street that catered to the local Chinese population. The building still exists today and is on the National Register of Historic Places. It is also one of the few remaining historic structures leftover from Chinatown, roughly considered the area between Chorro, Mill, Morro, and Monterey streets. The majority of Chinese laborers who worked on building the narrow-gauge track lived in historic Chinatown and were recruited at the Ah Louis store. This narrow gauge rail, however, was fated to become obsolete. Eventually, the non-standard freight-car width contributed to the downfall of the line because goods had to be off-loaded from the cars to be routed to the rest of the nation via 4-foot-8-and-half-inch-wide standard gauge railways such as the Southern Pacific, which was slowly making its way towards San Luis Obispo.

In 1882, the railway operator of the narrow-gauge rail from the port to the interior cities merged with the Pacific Steamship Company and was re-christened the Pacific Coast Railway. Gradually, the railroad was extended to Los Olivos (Figure 4). By the late 1880's, Port Harford was handling over 400 ships per year. This coincided with the beginning of oil exploration in the Santa Maria Valley in 1888 leading to large-scale oil discovery and extraction operations around the dawn of the 20th century. The burgeoning local oil industry necessitated the ordering of special tank cars to allow local petroleum products to be shipped to Port Harford on the narrow-gauge Pacific Coast Railway for trans-shipment via oil tankers to ports throughout the world.

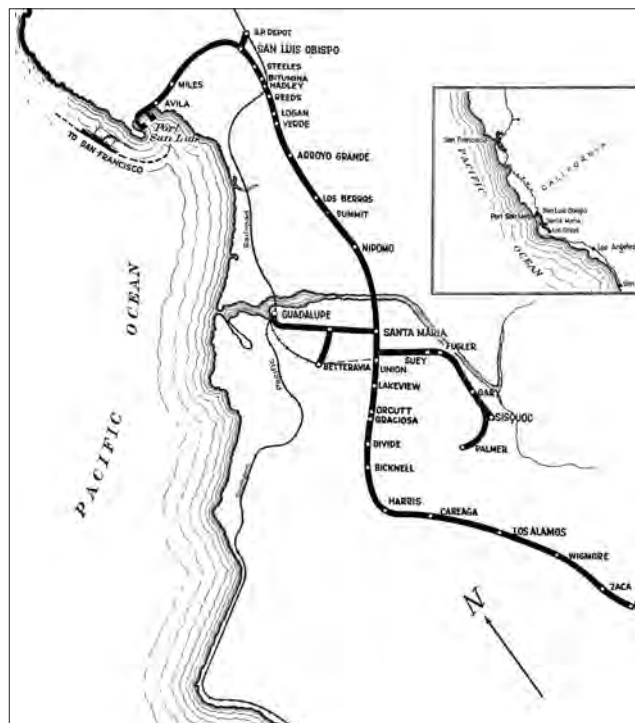


Figure 4
Pacific Coast Railway
map, 1915. (source Best,
1964, p. 28)

The City's Residential Expansion

In addition to creating an economic stimulus to the local agricultural and oil industries, the railroad helped open up new residential areas in San Luis Obispo. Residential tracts developed between 1874 and 1891 are noted and located on the map in Figure 5, and illustrate the ring growth that occurred around the city core in this period. The annexations of this period clearly illustrate a pattern of land speculation adjacent to and overlapping the Southern Pacific railroad track right-of-way, and a general shift in new residential development towards the eastern and southern limits of the city.

Most of the railroad workers living in San Luis Obispo at the turn of the century chose to locate their families in downtown San Luis Obispo, although some of them also opted to live in the new subdivisions near the southern end of town. In particular, The Loomis, McBride, and Homestead tracts were popular with railroad workers as they were adjacent to the Southern Pacific rail yard and service facilities. Most of the subdivisions were approved by the city in 1887. That same year, the mainline of the Pacific Coast Railway reached Los Olivos in Santa Barbara County, marking the farthest geographical extent of the railroad. This was the peak period of the Pacific Coast Railway, at the time the dominant means of moving people and goods throughout the Central Coast region.

Regional Implications

Although San Luis Obispo prospered as a regional economic hub by virtue of the Pacific Coast Railway, it was still relatively isolated from the rest of the state. It lacked a rail connection to San Francisco in the north and Los Angeles in the south. The Southern Pacific Railroad terminated at Santa Margarita north of the City of San Luis Obispo for years, as it was both costly and dangerous to construct the tracks across the Cuesta Grade. But, on May 5th, 1894, following extensive lobbying by local prominent businessmen such as Isaac Goldtree and J.P. Andrews, and after deals to secure local financial backing were struck, the City of San Luis Obispo was finally connected to San Francisco via rail. The first train from San Francisco was greeted in San Luis Obispo with an enormous celebration at the luxurious new Ramona Hotel.

The Southern Pacific Railroad and Tourism

The Pacific Coast Railway played a major role in diversifying the economy of the city of San Luis Obispo and stimulated commerce and trade in the hinterland by enabling trade with a much larger region. However, the arrival of the Southern Pacific marked the beginning of a slow decline for the Pacific Coast Railway. The Southern Pacific Railroad offered lower freight rates from San Luis Obispo than from other areas in Northern California so that it could compete with (and undercut) the Pacific Coast Railway. By the turn of the century Port Harford had lost most of its general shipping business and focused almost exclusively on exporting petroleum, which arrived via pipeline from Coalinga, in Fresno County, California. In an attempt to become more competitive, the Pacific Coast Railway created a spur line to the Southern Pacific Railroad Depot along what is now South Street to facilitate the transfer of goods and passengers in either direction. “However,

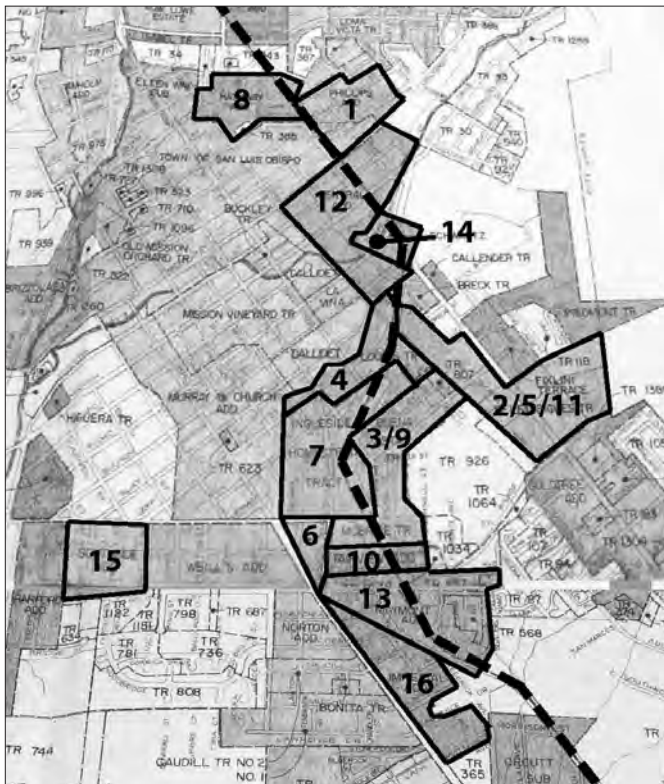


Figure 5
1874-1891 land annexations around the Southern Pacific Railroad.

1. Phillips Addition (1874)
2. Deleissigues Tract (1876)
3. Buena Vista Tract (1885)
4. Loomis Tract (1887)
5. Deleissigues Subdivision (1887)
6. McBride Tract (1887)
7. Homestead Tract (1887)
8. Hathway Addition (1887)
9. Buena Vista Addition (1887)
10. Fairview Addition (1887)
11. Deleissigues Addition (Block 5) (1887)
12. Central Addition (1888)
13. Maymont Addition (1889)
14. Schwartz Addition (1889)
15. South Side Addition (1891)
16. Imperial Addition (1891)

by 1913 only a single daily mixed train (passenger and freight) ran between the Port and San Luis Obispo” (Rice, 2006).

The Andrews Hotel, the Ramona Hotel and the Central Addition subdivision in which it was located were speculative developments based solely on the Southern Pacific’s arrival. The Southern Pacific Railroad created an instant tourism industry in San Luis Obispo. The 112-room Andrews Hotel, in a corner lot at Monterey and Osos streets, opened in 1886 but a fire burned it to the ground only seven months later. The 144-room Ramona Hotel, opened in 1888, was located close to the Southern Pacific tracks and occupied the entire city block between Higuera, Johnson, Marsh, and Essex (present-day Pepper Street). Designed to cater to upscale travelers it featured state-of-the-art amenities such as electric lights, hot and cold running water, and “a system of electric bells connected between the hotel office and all 114 rooms, as a safeguard against both fire and burglary” (Nicholson, 1980). Its construction and development was so heavily based on the advent of the railroad that the hotel constructed its own Southern Pacific Train Depot (Figures 6 a & b). Tragically, despite its modern safeguards, with the exception of the train depot, the hotel was destroyed by a fire in 1905. The well preserved depot is now part of the Dallidet Adobe Gardens in San Luis Obispo, and a historical marker provides some insight on the relationship between railroad and tourism at the time, noting as follows:

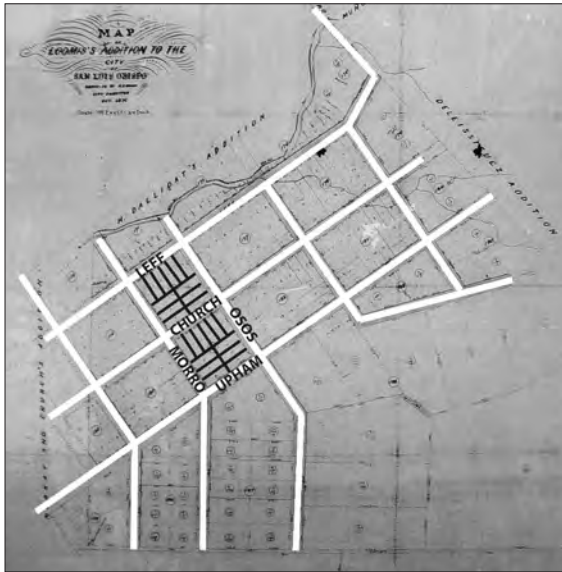
In March of 1896, the Southern Pacific Railroad officially declared that the Ramona Hotel will be an eating station for passengers heading north and south. *‘It is expected that within a few days tickets can be purchased from the Ramona station and baggage checked from the same point. The station building has been completed several days...so that the station may present an attractive appearance to strangers.’ San Luis Obispo Morning Tribune 1896*. Trains which did not include a dining car stopped to allow passengers a meal at the Ramona Hotel. A street railway running on Marsh Street to the rear of the hotel connected the street car line to the new depot (The Historic Marker Database, 2011).

City Plats and the Southern Pacific

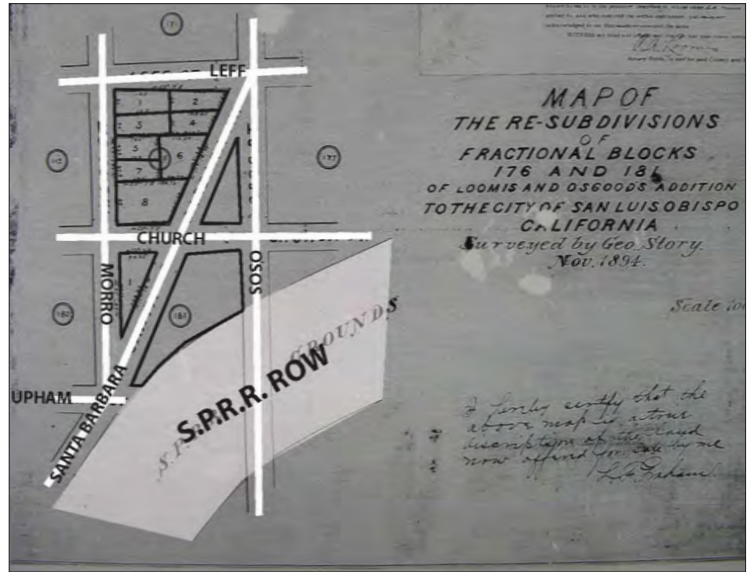
Like many other sub-divisions of that time, the Central Addition had to be re-platted when the Southern Pacific Railway routed the railroad directly through it, effectively cutting the eastern part of the city in half and creating dangerous at-grade crossings for people living on the “wrong” eastern side of the tracks. This demarcation of what is considered close to downtown and what is not, (west and east of the railroad respectively) continues to linger today. This phenomenon affected the Loomis Tract, and the resulting parcel configurations in the present-day blocks between Upham, Morro, Osos, and Leff are quite transformed from the original grid plan (Figure 7 a & b). Today this reconfiguration lends an unpredictability and charm to the city fabric in that area of town.

Figures 6 a & b
The Hotel Ramona with convenient horse- drawn street car (source Best, 1964, p. 38). The hotel’s train depot is a historical landmark on the Dallidet Adobe Grounds (right).





Figures 7 and 8
The Loomis Tract of 1887
(left) and the Loomis and
Osgood re-subdivision of
1894 (right).



Railroad Worker Housing 1904 and 1914

The advent of the Pacific Coast Railway in the city, and the subsequent arrival and dominance of commerce by the Southern Pacific, impacts the fabric of the city by substantially moving the city's center of gravity away from the Mission core. Telephone directories from the turn of the century provide some clues about this shift. A rough sketch of the locations of railroad worker housing helps delineate shifts in city morphology during the period when the Pacific Coast Railway was dominant, and then after the Southern Pacific's arrival. Figure 8 is a map of San Luis Obispo illustrating where railroad workers were noted as living according to the 1904 city directory. It reveals that most of the railroad workers still lived in downtown San Luis Obispo with a very high concentration of lower-skilled workers living at the Laughery boarding house located at the corner of Higuera and Morro Streets. The boarders had European surnames such as Carter, Dixon, Hall, Hoogendyk, Kennedy, Lewis, Lynch, McComis, Phillips, and Schaumleffle reflecting who was migrating to this area and finding work on the railroad. Predictably, a cluster of managers and train conductors (included in the "Train Personnel" category) is found on the better location of Buchon Street. This street attracted higher income residents precisely because of its slightly higher elevation and distance away from the soot and grime created by the coal-powered steam engines. In contrast, the map reveals that most of the railroad engineers (also included in the "Train Personnel" category) lived along a two-block stretch of Islay Street between Morro and Santa Rosa Streets.

In contrast to the 1904 map, the 1914 map illustrates a tangible shift in railroad worker housing from the downtown to the eastern edge of town near the tracks of the Southern Pacific Railroad (Figure 8 and 9). It also reveals that, by 1914, the vast majority of workers in the city worked for the Southern Pacific Railroad instead of the Pacific Coast Railway. It is also apparent that while the majority of Southern Pacific workers clustered near the tracks and each other, the workers of the Pacific Coast Railway were quite dispersed throughout the west side of the city. The typical construction of homes owned by railroad employees varied according to income, but most were simple bungalow kit homes ordered from Sears, Roebuck, and Company and built out of redwood imported from San Francisco (Figure 10).

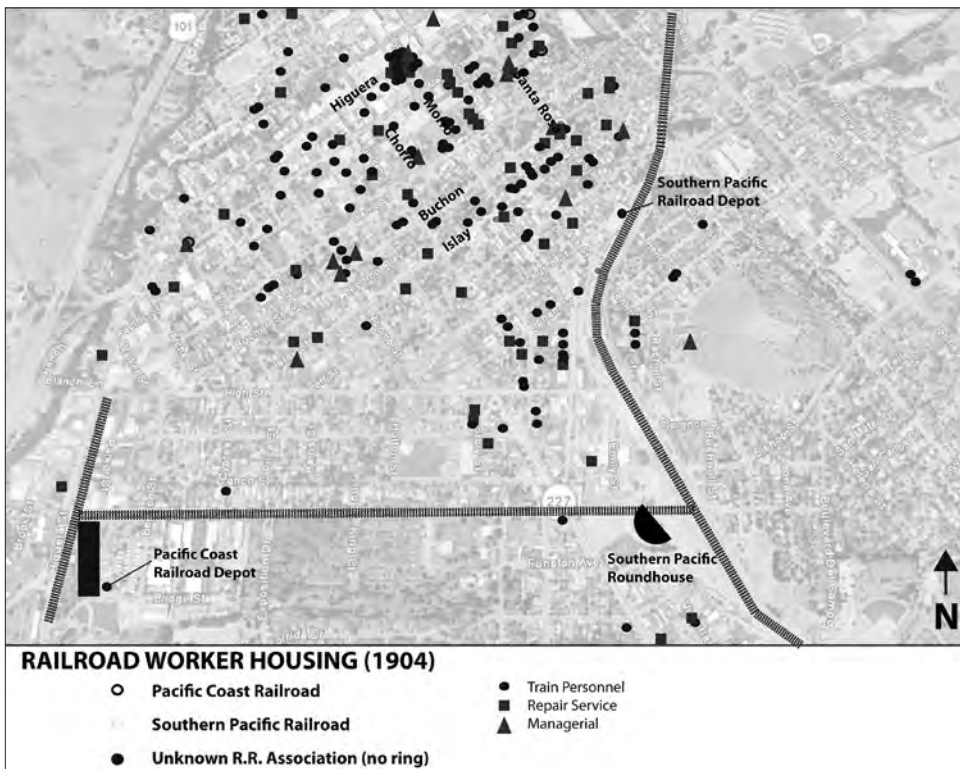


Figure 8
Location of railroad worker housing in 1904.

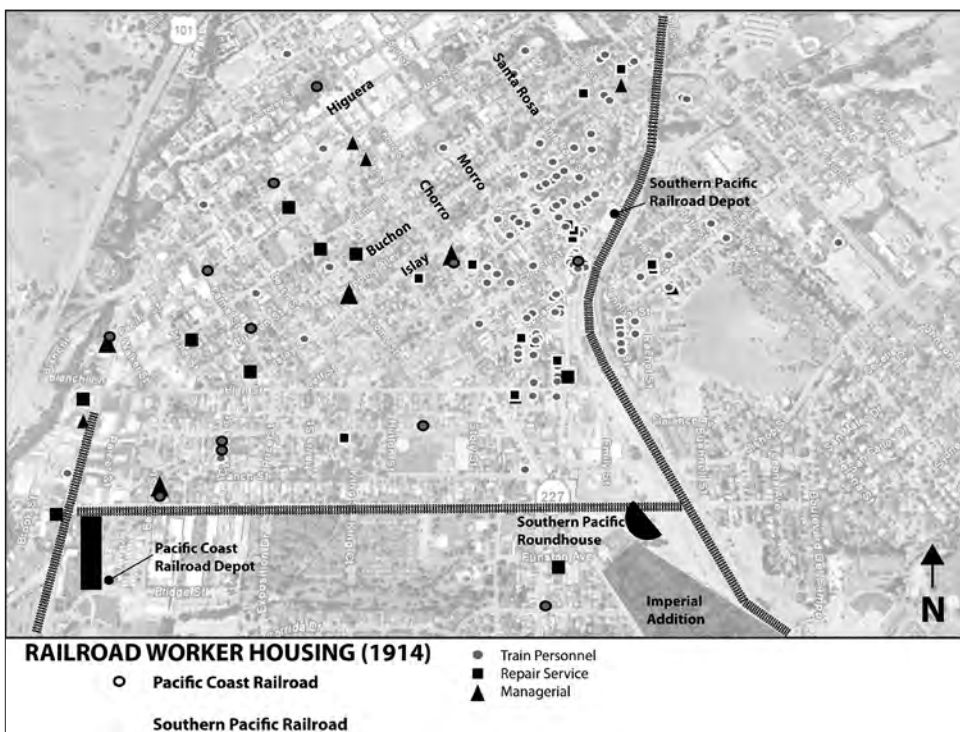


Figure 9
Location of railroad worker housing in 1914.



Figure 10
Typical railroad
worker house at 2546
Victoria Street.

Figure 11
The Historic Railroad
District. (courtesy City of
San Luis Obispo)



New worker housing for the Southern Pacific railroad shifted the city's growth towards the southeast of town in new subdivisions such as The Imperial Addition. The location was convenient because of its proximity to the Southern Pacific roundhouse where steam engines were maintained and turned around on the locomotive turntable for their journey back up the grade. Eventually, the neighborhood became known as "Little Italy" due to the high percentage of Italian railroad workers living there.

The neighborhoods surrounding the Southern Pacific tracks continued to thrive through World War II when passenger rail traffic in San Luis Obispo reached record numbers. However, after the war, the steam locomotives were gradually replaced by more efficient diesel engines that required less maintenance, and

most of the local railroad workers found themselves out of a job. Finally, in 1959, the obsolete Southern Pacific roundhouse was demolished (overnight) by the Southern Pacific administration, much to the chagrin of the city's preservation community. The turntable remained until the early 1990's when it also was removed by the Southern Pacific without notice. As the railroad's demand for workers diminished, the formerly thriving Imperial Addition neighborhood gradually turned into an industrial and warehouse area. However, its location along the Broad Street corridor connecting to the airport and new subdivisions to the south of the city make it a potential site for revitalization and economic development.

Decline of the Railroad-based Economy

The decline of the railroads in general can be correlated to the rise of the automobile as the preferred mode of travel. It followed the creation of the interstate freeway system which revolutionized the geography of central places throughout the nation. The automobile brought with it personal freedom for individuals and families to choose when, how, and where to travel. The mobility it gave to Americans and the way of life the automobile represented was the envy of the world, and emerging and established nations sought to emulate the American ideal. By the 1980's, passenger rail traffic stopping in San Luis Obispo had decreased to insignificance, even though Caltrans records show an increase in overall Surfliner ridership during the same period (California Department of Transportation, 2008), resulting in a decline of neighborhoods surrounding the station. The area's gradual slide into obscurity attracted the city's attention in the 1990's and a major effort was undertaken to create new opportunities for reinvestment in sites adjacent to and near the rail tracks.

The Railroad District

Designated a historic district in 1998, the Railroad District has been planned to simultaneously enable diligent preservation of its historic character and spur forward-thinking and sustainable urban revitalization (Figure 11). Major projects completed over the past 13 years include: the Jennifer Street Pedestrian and Bicycle Bridge (see Figure 11) which has helped link the east side of the railroad area to the downtown for "green" transportation modes; the Chinese Railroad Workers

sculpture on Osos Street which commemorates the contribution of the Chinese laborers in the construction of the railroads; construction of the new Villa Roma restaurant; the restoration of the Park Hotel to accommodate restaurants in addition to long-term residential uses; the restoration and adaptive reuse of the Channel Commercial Wholesale Company building in Railroad Square¹; the opening of the Sanitarium Bed and Breakfast; and the dedication of the Railroad Safety Trail. Several new commercial structures have been built along Santa Barbara Street, and the city also built Fire Station #1 during this period. Mixed-use development is now beginning to happen within the Imperial Subdivision.

In addition, there has been a successful community effort to preserve the history of the railroads in San Luis Obispo with the creation of a Railroad Museum in a historic freight warehouse building near the tracks, which has a rolling stock exhibit on a dedicated museum spur track. The City of San Luis Obispo and the Railroad Museum Board of Directors have expressed interest in creating a contemporary commercial structure at the site of the former roundhouse, similar to the modern structure that is on the site of the Pacific Coast Railroad terminal. However, ambitions to build in the area are constrained by the fact that most of the real estate surrounding the tracks is still owned by the Union Pacific Railroad (formerly the Southern Pacific). In addition, the roundhouse site is heavily contaminated and would require significant remediation before it could be used for new and habitable adaptive reuse. Although some projects may not currently be feasible, this area of the city, which grew up with the advent of the railroad, now appears poised and strategically located to play a significant and different but equally influential role in the city's future development.

Given the present concern over greenhouse gas (GHG) emissions from motor vehicles, rising fuel costs, shortages of oil, and the centralized land-use patterns popular in New Urbanism and required by SB 375, it is possible that the railroad, or some other form of fixed rail public transportation might once again become a preferred mode of long-distance transport to the major metropolitan areas south and north of the city and beyond. If California does succeed in investing in a high speed train between San Francisco and Los Angeles, perhaps a connection into that corridor might be worked out. Passenger train service to the city of San Luis Obispo has increased in the past two decades from one through train daily in each direction between Los Angeles and Seattle (Coast Starlight) to include a regional train from Los Angeles to San Luis Obispo, and a train in each direction between San Diego and San Luis Obispo. "From 2000 to 2006 total ridership on both train services increased 16% from 94,500 to 109,469. Ridership on the Pacific Surfliner increased 100%, from 39,000 to over 78,000, due in part to the addition of a second train in 2004" (San Luis Obispo Council of Governments, 2010).

In the 21st century there is a potential for both passenger and freight traffic to experience some shifts away from gasoline-powered modes of transport. If and when that happens, the Railroad District in San Luis Obispo may be in an excellent position to benefit from it. However, if it does not, given the growth of the city towards the airport in the south, the district's increasingly central location will create opportunities for both tourism-led, innovative, and/or light-industrial economic growth. In the Railroad District, the charm and nostalgic connection to the history and architectural fabric of the past, as well as its strategic location for growing knowledge-based industries of the future, seems promising and worthy of investment.

¹ Significant for its architecture as well as the role it played in the community's history, the Channel Commercial building was built as a wholesale grocery outlet for the company. Its proximity to the railroad facilitated the delivery and shipping of goods. It was the leading wholesale establishment of its kind between San Francisco and Los Angeles (Davis, 1914).

References

- Best, G. M. 1964. Ships and Narrow Gauge Rails: The Story of the Pacific Coast Company. Berkeley, CA: Howell-North.
- California Department of Transportation. 2008. California State Rail Plan 2007-08 to 2017-18. Sacramento: California Department of Transportation / State of California.
- City of San Luis Obispo. 1998. The Railroad District Specific Plan. Community Development Department, City of San Luis Obispo.
- Davis, E. A. 1914. Davis' Commercial Encyclopedia of the Pacific Southwest: California, Nevada, Utah and Arizona. Oakland: Ellis A. Davis.
- The Historical Marker Database. 2011. Retrieved from <http://www.hmdb.org/marker.asp?marker=38457>
- Parsons, G. L. 1995. Port San Luis: Trials and Tribulations 1855 to 1995. San Luis Obispo, CA.
- Rice, W. 2006. San Luis Obispo's Other Railroad. San Luis Obispo County Journal.
- San Luis Obispo Council of Governments. 2010. Maximizing System Efficiency – Transportation Demand Management/Transportation System Management (TDM/TSM). San Luis Obispo, CA.

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THREE CAL POLY TEAMS COMPETE IN THE NINTH ULI - GERALD D. HINES URBAN DESIGN COMPETITION.

HEMALATA C. DANDEKAR AND UMUT TOKER

Every year the Urban Land Institute runs the prestigious Gerald D. Hines Urban Design Competition open to interdisciplinary teams of graduate student nationwide. In this article, faculty Hemalata Dandekar and Umut Toker, who jointly coordinated the entries of three Cal Poly student teams, describe the projects and reflect on the pedagogical effects of their efforts.

The Urban Land Institute's Gerald D. Hines Student Urban Design Competition stimulates visioning of innovative built environments. Recognizing that "successful real estate development and design in the 21st century requires intensive collaboration across disciplines and sectors" the Hines competition invites graduate students in the United States or Canada to form a multidisciplinary five-person team to intensively tackle a real land use challenge in a U.S. city.

After the ULI announces the city, the project area, and the challenge, teams have only two weeks to submit their proposals that must include a plan for the whole area as well as a "demonstration project," a pro-forma, and creative solutions for financing and implementation. CRP graduate students have led Cal Poly in this competition since 2006, when our team received an honorable mention (see Focus IV, 2007).

In this ninth year of the competition three multidisciplinary teams - eight Masters of City and Regional Planning, three Masters of Business Administration and four 5th year Architecture students worked full steam, night and day, from January 17 to January 31st. Competing with over 150 teams from universities all over the USA they were challenged with "Maximizing the Transit Opportunity: Mount Baker Station Area Seattle, Washington." The competition called for a comprehensive design/development program for a large site around the Mount Baker light-rail station three miles southeast of downtown Seattle. The station is in the heart of an economically and ethnically diverse neighborhood. The clients, a local family, owning a 33 acre site by the station occupied by several tenants sought a long-term vision for their property. The city is in support of a sustainable, transit-oriented development.

The three Cal Poly teams built on significant co-operative research and analysis to develop three quite distinct solutions which, in each teams words, were characterized by the following:

MLK Place

Team members: Cindy Ma, James Hinkamp, Joanna Pong, Helen To and Jessie Wilkie

The U.S. Census considers the Rainier Valley 98118 zip code to be one of the most diverse neighborhoods in America. The Multi-cultural Livable Kinetic Place, located in the heart of Rainier Valley, is a local reflection of the world. The historical significance of the area derives from generations of immigrant settlement, successful lumber and paper production industries, and as a hospitable locale for America's pastime, baseball. Such foundational elements ripen the opportunity for innovative development in North Rainier Valley. Small business and mixed-use development flourish, in conjunction with an ecologically sensitive landscape, supported by a thriving local economy capable of incubating and attracting business.



Hemalata C. Dandekar, PhD. is professor and head of Cal Poly's CRP Department.



Umut Toker, PhD. is Assistant Professor at Cal Poly's CRP Department.

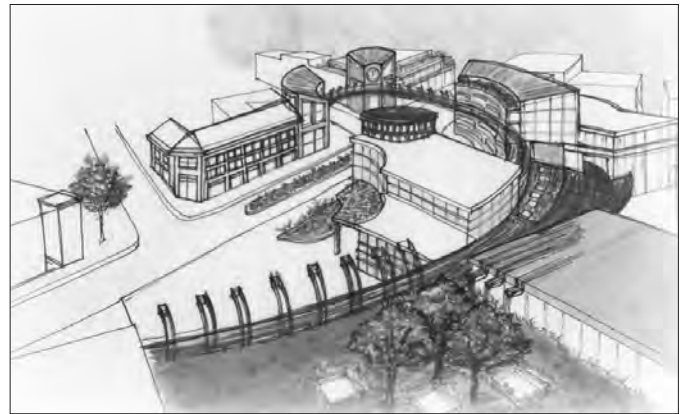
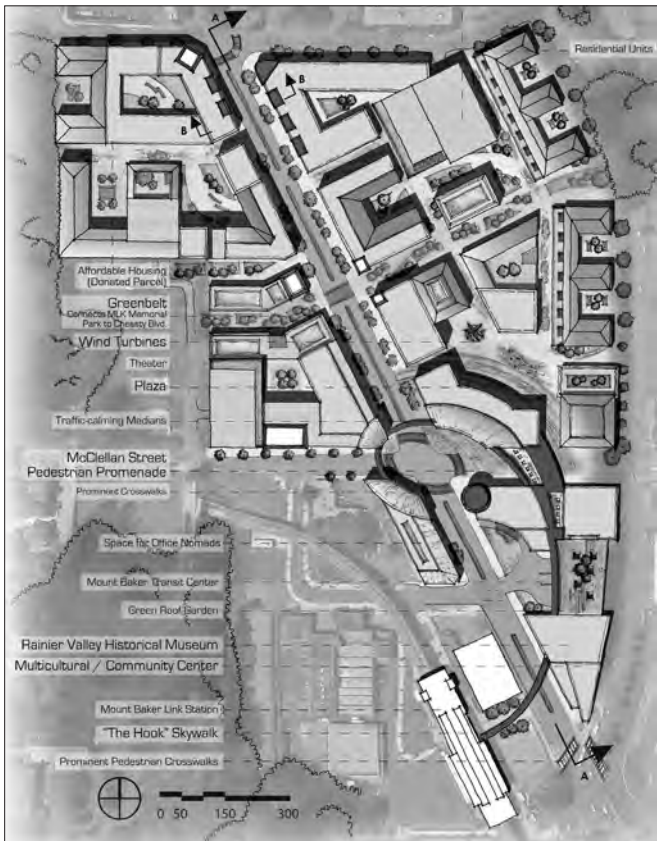


Figure 1 a & b
MLK Place, illustrative site plan and a view of “The Hook”, a skywalk that invites visitors and local residents to safely access MLK Place to and from the Mount Baker light rail station.

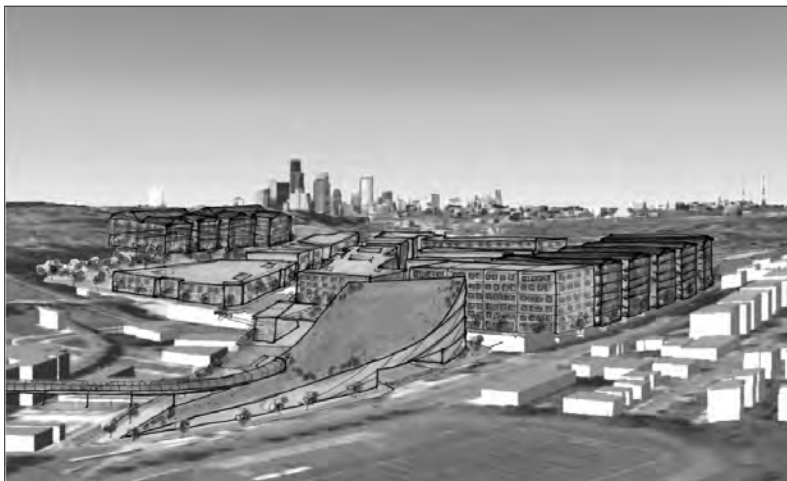
MLK Place is also situated strategically along the Seattle Link light-rail transit corridor. The transit-oriented development actively contributes to the City’s carbon neutral policy emphases. Extensive, ecologically-sensitive technologies are employed throughout MLK Place, to capture prevalent, natural forces of rain and wind in Rainier Valley. Sustainable practices are practiced not only through physical engineering, but also by promoting healthy living. The result is a locally sophisticated neighborhood capable of global engagement.

The Patch

Team members: Anthony Kallioinen, Cynde Kasperovich, Lindsey Miller, Hanh Nguyen and Keith Williams,

The Patch is designed as a neighborhood center, a place where the diverse population of the surrounding area can eat, live, work, play, and shop together. While The Patch offers a wealth of opportunity for socializing and community activities at the community center, art gallery, and sensory gardens, its primary draw will be food. Food is one of the unifying bonds people share across cultures, similar to that of music or dance. The Patch harnesses this sense of unity in several ways, ultimately creating a life-cycle journey of food throughout the site.

The journey begins in the multi-story iconic greenhouse building, where local residents are provided individual plots for gardening and food production, as well as gardening tools and classes. In the floor below, the enclosed, vibrant international market hall provides an opportunity for small-scale, permanent food vendor stalls similar to those of the Boqueria in Barcelona or Reading Terminal Market in Philadelphia. Culinary students from the new international culinary school across the street come to the market each day for fresh produce, meats, and cheeses, followed closely by the talented and established chefs from the many neighboring restaurants. Food trucks line up along the Food Truck Ramblas throughout the day, providing quick meals to workers and visitors. Ultimately, food not utilized is collected throughout the site, where it makes its journey to the compost pile and eventually back to the greenhouse as prime soil, completing a which sustainable cycle.



Figures 2 a & b
The Patch, illustrative site plan and a view towards Downtown Seattle.

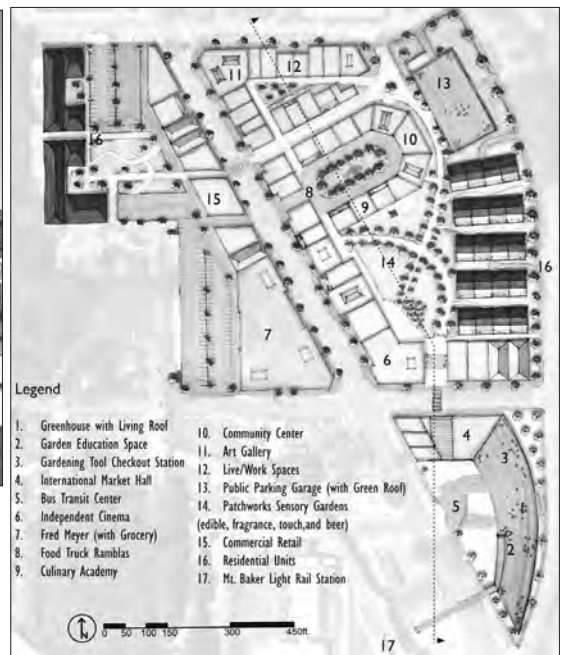
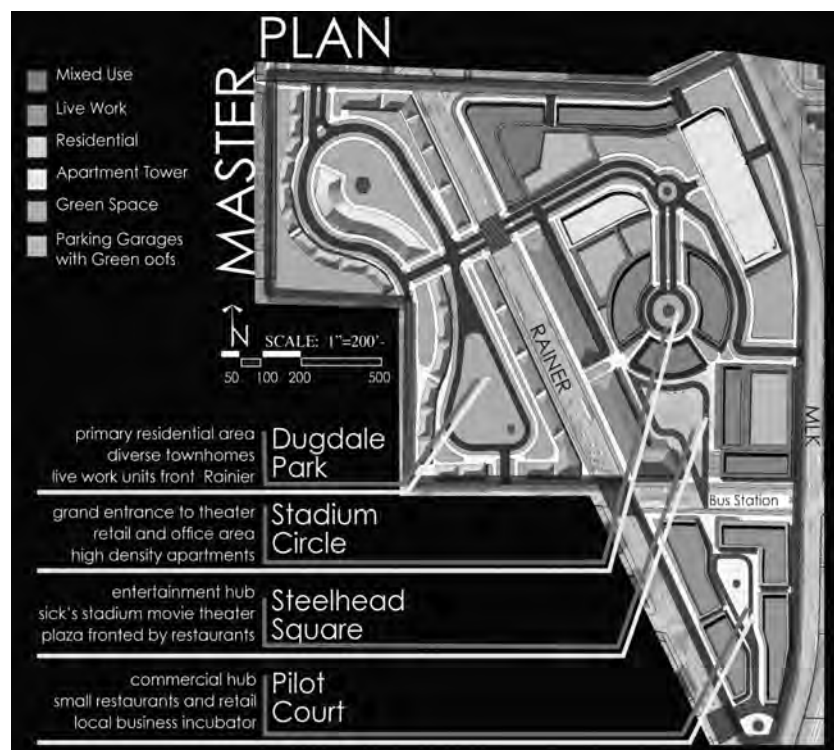


Figure 3
Steelhead Station, site plan.

Steelhead Station

Team members: Teresa Chan, Emily Lipoma, Meaghan Mroz-Barrett, Daniel Noland, Christopher Read

Capitalizing on the movement and activity surrounding the existing transit station and local institutions, Steelhead Station develops the surrounding area to be a live, work, and entertainment destination. Economic and physical redevelopment go hand in hand as new buildings and a non-profit organization encourage local business development. Small units and live/work units are built to accommodate growing businesses, and a restaurant development organization partners with small restaurant owners to share capital resources. The redesign of Steelhead Station fosters a unique dining attraction as small businesses and retail establishments benefit from outdoor seating in the central alleyway. The diversity of uses and user groups ensure activity throughout the day and into the evening. The centrally-located courtyard and movie theatre pay homage to the history of baseball in the area and serve the daily needs of the community as well as cultural and entertainment needs. The small business development, higher density residential units, grocery and retail shops, as well as the entertainment features of the development each play a vital and balanced role in creating the core of community activity at Steelhead Station.



Pedagogic Reflections

The Cal Poly teams were advised by CRP faculty Hemalata Dandekar and Umut Toker. Along the journey to creating their end products they received valuable critique from Professors Henri de Hahn, William Siembieda, Cornelius Nuworsoo, James Doerfler, and Dean Tom Jones. Four CRP alumni with many years of land-development practice in Orange County travelled to San Luis Obispo mid-cycle to provide guidance to the student teams. They energized the groups and, at the same time, underscored the business and bottom-line elements of the mandate. The alumni were: Michael C. Adams, AICP (President, Michael C. Adams Associates, Huntington Beach), Jack Camp (President, Urban Design Camp, Laguna Beach), Peter J. Koetting (Partner, Westar Associates Real Estate Development, Costa Mesa) and Peter Templeton (Principal, Templeton Planning Group, Newport Beach).

Students who were involved in this grueling two weeks of work report that this was the single most valuable experience they have been involved in at Cal Poly as they were forced to make decisions and move through the full cycle of conceptualizing a large project in very fast order, relying on all team members to do their part. The process learning was considerable. The two lead faculty are enthusiastic about what was achieved and feel that the effort yields considerable pedagogic benefits to senior students who are about to launch their professional careers, serving to consolidate their commitment to an integral approach to development, planning, and urban design.



Figure 6

Steelhead Station's Pilot Court, night time rendering.

INTERNATIONAL

Ministério
dos Assuntos Exteriores





Adrienne I. Greve, PhD, is assistant professor at the CRP Department. Her research interests are environmental planning and climate change.

RIO DE JANEIRO: ENERGY AND CLIMATE PARTNERSHIP OF THE AMERICAS

ADRIENNE I. GREVE

Energy conservation and climate change impacts are priority issues for planning in the US and are becoming so around the world. Adrienne Greve writes about her experience as an invited speaker in the first international conference of the Energy and Climate Partnership of the Americas in Rio de Janeiro, Brazil which discussed the planning and housing needs of the low income populations.

“As Latin American countries experience continued growth and urbanization, there is a realization of the need for integrated, humanistic, and climate-proof planning. Virtually every city in Latin America and the Caribbean is in need of comprehensive planning to address the challenges of energy production, natural disasters, and climate change.”
American Planning Association (www.ecpapanning.org)

In November 2010, the Energy and Climate Partnership of the Americas (ECPA) Urban Planning Initiative kickoff event was held in Rio de Janeiro, Brazil. The meeting, titled “Sustainable Urban Planning and Energy Efficient Construction for Low-income Areas of the Americas,” provided a forum for academics, politicians, practicing planners, and non-governmental organizations to exchange ideas regarding some of the most pressing challenges facing cities throughout the Americas including housing, climate change, hazards, and energy production. It served to set the agenda and priorities for the 30 month duration of the ECPA Initiative. Participants came from countries throughout North, South, and Central America, which provided breadth to both the problems and potential solutions examined at the meeting.

I participated in the kickoff event as part of a panel focused on climate change adaptation and mitigation. I focused on the approaches to climate change utilized in California to complement the perspectives of those joining me on the panel who discussed climate vulnerability assessment in Rio de Janeiro and the United Nations’ efforts in South America regarding climate-resilient planning. The discussions that followed the presentations examined not only populations who were most at risk through an examination of hazards exacerbated by climate change, but the manner in which to devise policy in the face of scientific uncertainty.

Figure 1
Adrienne and other panelists at the forum.



In addition to the opportunity to listen to a diversity of perspectives from experts throughout the Americas during the formal sessions, the conference provided the opportunity for participants to visit examples of urban planning efforts in low-income areas of Rio de Janeiro with City planning staff. One of the most enriching of these trips focused on the city’s efforts to improve conditions in the favelas (or slums), for which it is famous.

Nearly one in five residents of Rio de Janeiro live in a favela (CNN, 1997). These communities, some of which have been in existence for over 100 years, often have limited access to basic infrastructure such as water, wastewater, stormwater facilities, and power. The City of Rio de Janeiro has been pursuing an ongoing effort to “upgrade” these neighborhoods that included

community development, introduction of basic infrastructure, the hiring of local residents to implement the construction to serve as job training, and, most importantly, construction of a local daycare to take care for children between the ages of six months and six years, when they enter school. The addition of a daycare to each favela selected for upgrade allowed adults in single-parent households to more easily enter the workforce.

In addition to learning from the efforts of the city to restore these neighborhoods, conference participants were able to enjoy many other aspects of the city's iconic setting from the beaches in Copacabana and Ipanema, the view from Corcovado, and the architecture and history that characterizes downtown. I left Rio de Janeiro grateful for the opportunity to exchange ideas with leaders from throughout the Americas and for the chance to experience the beauty and vibrancy of the city.

References

- American Planning Association. 2010. Join the Partnership. Retrieved from <http://ecpapanning.org/wp-content/uploads/2011/04/2-pager.pdf>.
- CNN World. 1997. A century of poverty in Rios favelas. Retrieved from http://articles.cnn.com/1997-08-07/world/9708_07_brazil.favela.anniversary_1_favelas-slums-rio-de-janeiro?_s=PM:WORLD.



Figures 2 & 3
Ipanema Beach (top) and a view from the Corcovado Hill showing the Sugar Loaf Hill and the entrance to the bay.



Figures 4 & 5
A pathway in one of the favelas currently being upgraded (left) and a view of one of the favelas visited by conference participants.



SPOTLIGHT





Hemalata C. Dandekar, PhD, is professor and head of Cal Poly's CRP Department. Previously she was director, School of Planning, Arizona State University.

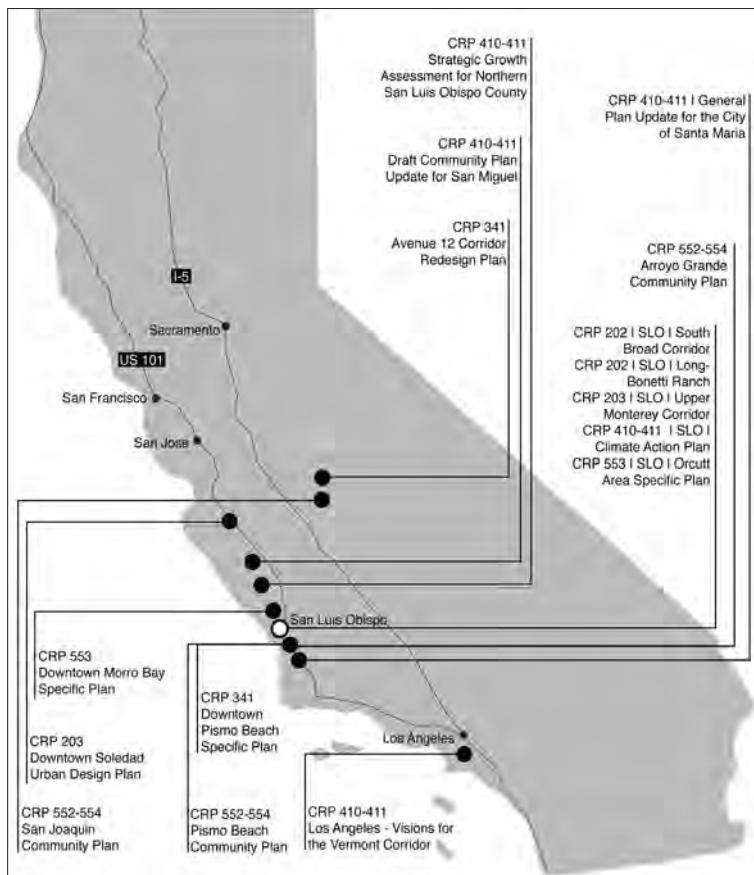
LEARNING FROM CALIFORNIA: HIGHLIGHTS OF CRP STUDIOS, SPRING 2010 - SPRING 2011

HEMALATA C. DANDEKAR

CRP's department head writes about the variety of undergraduate and graduate studios that served California communities from Winter 2010 to Spring 2011. The studios continue to cover a lot of ground and to prove their pedagogical success in applying Cal Poly learn-by-doing philosophy. They helped shape better places and create more sustainable cities.

Our studio-based curriculum, a hallmark of the City and Regional Planning (CRP) programs at Cal Poly San Luis Obispo, is firmly embedded in the Cal Poly philosophy of "learning-by-doing." This emphasis on hands-on learning provides an additional benefit --serving the needs of many communities. Once again our foci on physical and environmental design are evident in the projects we completed in various California communities this past year. The studio sequences for both degrees are elaborated at the end of this article, in appendices 1 and 2. It builds: students' graphic and analytic capabilities; engages them on problems of increasing scale and complexity (site to regional plans); and elicits outputs from two dimensional layouts to policy and implementation strategies. The graduate studios, intense and compressed, cover physical and land use but also emphasize policy and theory.

Figure 1
Communities served by CRP studios in 2010/11.



Community clients sponsor many of our studios. They find that student work enables them to define a scope of work that can later be addressed by professional consultants. The locations of where we worked last year are shown in Figure 1. We embrace the opportunity community sponsorship provides to learn from engagement with grounded realities and needs in California. Students are eager to help develop plans which can make a difference and benefit clients. We look to you for your ideas and welcome opportunities you may have for such collaboration in the future.

Placemaking: San Luis Obispo's South Broad Corridor. Undergraduate studio, CRP 202, Winter 2010. Instructors Vicente del Rio and Umut Toker.

The city's smart growth policies rely on mixing residential with compatible uses, increasing densities, and encouraging infill development. In this class they were applied to a site on Broad Street, at the intersection with Santa Barbara Street, in San Luis Obispo's historic Railroad District. The project provided a mix of commercial buildings and housing (apartments and townhomes), and a series of public spaces and plazas while respecting the historic character of the place and creating strong connections to the surroundings and across the railroad lines.

**Urban Design for the Long-Bonetti Ranch, San Luis Obispo.
Undergraduate studio CRP 202, Winter 2011.**

Instructors Umut Toker and Dennis Combrink.

Located strategically at the corner of Tank Farm Road and South Higuera streets, the Long-Bonetti Ranch site offered students an opportunity to mix compatible land uses, increase land-use densities, encourage infill, and develop urban design proposals which were respectful of the existing historic structures.

**Upper Monterey Corridor Urban Design Study.
Undergraduate studio CRP 203, Spring 2010.**

Instructor Zeljka Howard.

Twelve blocks along Monterey Street between Santa Rosa Street and California Boulevard bordering the city's downtown area were designed to actualize their potential for downtown extension. The class proposals, which were documented on a series of posters and in a three-dimensional fly-through model, were presented to the City staff and a jury of planning professionals.

Downtown Soledad Urban Design Plan.

Undergraduate studio CRP 203, Spring 2010. Instructor Umut Toker.

In a sponsored project for the Community Development department, four visions for the urban design of downtown Soledad emerged from detailed site inventory and community residents' wishes about its future. Students conducted two community workshops to identify community needs and wishes. A CRP booth, set up in front of a busy grocery store in the project area, allowed responses to the student proposals, which included land uses, circulation, public space structure, and form-based codes. Final visions presented to the community and planning commission received a very positive response especially to the three dimensional fly-through visualization. Student work is the foundation for the Downtown Soledad Specific Plan currently being developed by the City of Soledad and its consultants.

Downtown Pismo Beach Specific Plan.

Undergraduate studio CRP 341, Summer 2010.

Instructor Umut Toker.

This Community Design Studio partnered with the City of Pismo Beach Community Development Department to develop specific-plan proposals for Downtown Pismo Beach. The studio, composed of fifteen CRP and five Landscape Architecture students, formed teams of five students and developed four alternative plans for the area. Teams visited Pismo Beach several times to interview residents, tourists, and business owners. They developed plan documents addressing land use, circulation, form-based codes, environmentally-conscious development, implementation, and phasing. Teams also developed a variety of visualizations using multiple media and

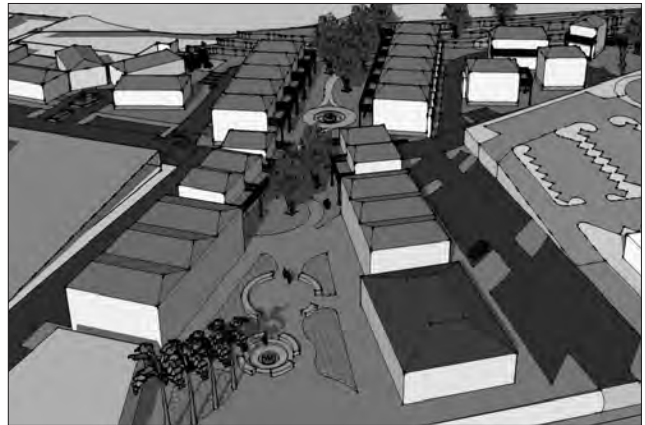


Figure 2
*Mixed-use project for the
Broad Street Corridor,
CRP 202. Team: L.
Barrera and M. Service.*



Figure 3
*Illustrative 3D model of
one of four CRP 203
proposals for Soledad.
Team: A. Douglas, K.
Evans, L. Lynch, M.
Sayles, and B. Syka.*



Figure 4

Illustrative site plan for Pismo Beach, CRP 341. Team: J. Amenta, G. Duer, P. McDonough, M. Lewis, and P. Tica.

Figure 5
Students in action at a community workshop in Los Angeles CRP 410/411.



computer software, ranging from over-the-board pencil and watercolor techniques to SketchUp and 3D Studio MAX for computer-based rendering. The proposals were very well received by the City staff and informed MCRP program's Graduate Community Planning Labs CRP 552 and 554 (Fall 2010 and winter 2011).

Avenue 12 Corridor Redesign Plan. Undergraduate studio CRP 341, Spring 2010. Instructor Vicente del Rio (in collaboration with Vangeli Evangelopoulos, LA 404)

In July 2009, CRP contracted with the Madera County Planning Department for the Avenue 12 Corridor Enhancement Project with three distinct but interrelated parts: community visioning, transportation, and corridor redesign (see the article in this issue). From July 2009 to July 2010 a visioning process was carried out by Umut Toker, and transportation studies were carried out by Cornelius Nuworsoo. In the spring of 2009, a joint urban design studio with CRP and Landscape Architecture students developed the Avenue 12 Corridor Redesign Plan, encompassing ideas for the street itself as well as for public and private development along it. Final reports and recommendations were submitted to the Madera County

Planning Department and, in the summer of 2010, were in the process of final approval for adoption by the community and the county planners.

Strategic Growth Assessment for Northern San Luis Obispo County. Undergraduate studios CRP 410 - 411, Fall 2009 - Winter 2010; instructor Zeljka Howard.

Taking a regional approach to growth, economic development, housing, resources, and the linkage of land use and transportation, CRP students identified areas suitable for urban expansion and the creation of new population centers to accommodate projected population growth. The final product included an expansion plan for Santa Margarita that the County could use to demonstrate the application of its recently adopted Strategic Growth Principles.

Visions for the Vermont Corridor in LA. Undergraduate studios CRP 410 - 411, Fall 2009 - Winter 2010; instructor Kelly Main (in collaboration with Margarita Hill, LA 402).

A "People's Plan" for the Vermont Corridor and surrounding neighborhood in downtown Los Angeles was developed with the Figueroa Corridor Coalition, consisting of 25 organizations that advocate for community benefits around the Staples Center Sports Complex in Los Angeles.

San Luis Obispo Climate Action Plan.
Undergraduate studios CRP 410 - 411, Fall 2009 - Winter 2010.
Instructor Adrienne Greve.

On the heels of the award winning Draft Benicia Climate Action Plan (see Focus 2009), students developed a Draft Climate Action Plan for the City of San Luis Obispo.

Draft Community Plan Update for San Miguel.
Undergraduate studios CRP 410 - 411, Fall 2010 - Winter 2011.
Instructor Zeljka Howard.

The San Luis Obispo County Building and Planning Department commissioned students to prepare a Draft Community Plan Update for San Miguel, an unincorporated community in northern San Luis Obispo County. Working closely with residents and County staff, students conducted three workshops and developed an extensive public outreach program that engaged all segments of the population in shaping the *Draft San Miguel 2035 Community Plan Update*. The County will draw on this planning process to prepare the Draft Public Review document and final San Miguel Community Plan.

General Plan Update for the City of Santa Maria.
Undergraduate studios CRP 410 - 411, Fall 2010 - Winter 2011.
Instructor Kelly Main.

The City of Santa Maria Community Development Department commissioned the class to prepare a Draft General Plan Update for the town located in northern Santa Barbara County. The class conducted an extensive community outreach effort to determine the changes that Santa Marians want for their city. Community input was gathered at the Santa Maria Farmer's Market, Waller Park, the Santa Maria annual Christmas parade, and the Abel Maldonado Community Center. The City of Santa Maria is currently updating their land-use and circulation elements and will be incorporating the class's work over the next year.

Morro Bay Downtown Specific Plan.
Graduate studio CRP 553, Spring 2010.
Instructors Umut Toker and Chris Clark.

Contracted by the City of Morro Bay, graduate students collaborated with the Morro Bay Downtown Steering Committee, City of Morro Bay Planning Commission, and Planning Staff to develop three Specific Plan Proposals for Downtown Morro Bay. The class conducted three community outreach activities, attending the farmers market and organizing two community meetings.

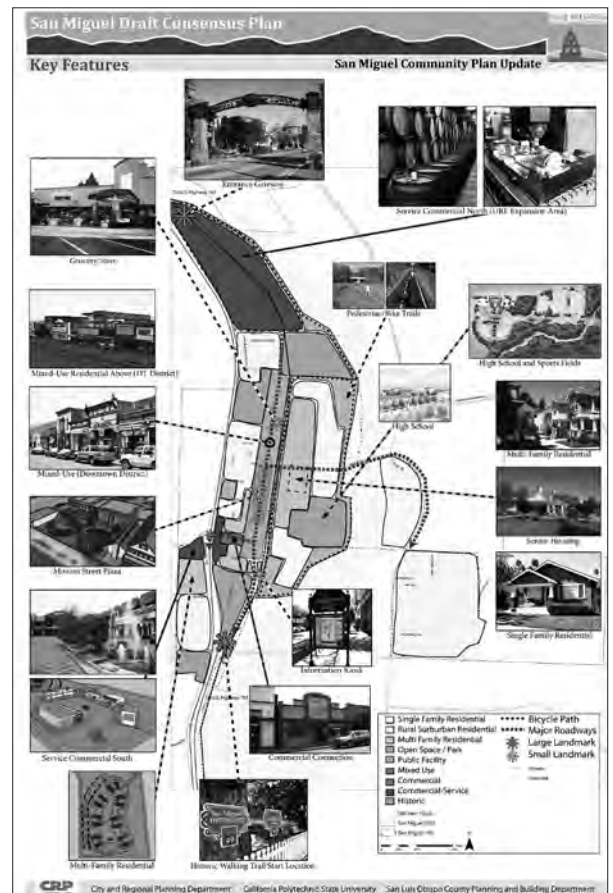


Figure 6
 Poster depicting key features of the Draft 2035 San Miguel Community Plan, CRP 410/411.

Figure 7
 Illustrative site plan, Downtown Morro Bay Specific Plan, CRP 553. Team: W. Harris, L. Heeren, A. Geratowski, S. Robidoux.





Figure 8
Illustrative site plan, Orcutt
Area Alternative Specific
Plan, SLO; CRP 553.

**San Luis Obispo, Orcutt Specific Plan.
Graduate studio CRP 553, Spring 2010.
Instructors Vicente del Rio and Paul Wack.**

Responding to the need to rethink suburban and fringe development, students reviewed a recently approved Specific Plan for the Orcutt Area in San Luis Obispo. They modified the plan to increase density, provide more commercial uses and an elementary school, and incorporate a future light-rail line running along the existing Union Pacific right-of-way. Using the existing EIR the students proposed a new design that makes a strong statement with a central core around a light-rail station.

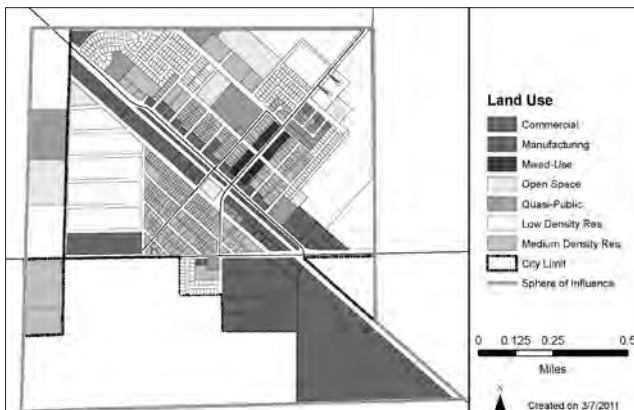
**Arroyo Grande Community Plan.
Graduate studios CRP 552 - 554, Fall 2009 - Winter 2010.
Instructors Cornelius Nuworsoo and Chris Clark.**

Two miles inland from the Pacific Ocean, the City of Arroyo Grande had a population of 17,080 residents in 2010. Students formulated a development scenario for 2030 to accommodate projected population and housing needs. The Preferred Growth Scenario, concentrated growth in the Grand Avenue Corridor by developing parcels to their full potential; preserved and enhanced the historical character of the Village; preserved the rural character of the City; achieved a zero net loss of agricultural land; acquired and expanded the network of conservation areas and open space for recreational opportunities; increased job potential to achieve an 80 percent jobs to labor-force ratio; and instituted a Transfer of Development Rights program.

**San Joaquin Community Plan.
Graduate studios CRP 552 - 554, Fall 2010 - Winter 2011.
Instructor Cornelius Nuworsoo.**

The City of San Joaquin in Fresno County sought to accommodate its population increase and minimize negative impacts of growth by striking a balance between preserving agricultural lands while meeting other land-use needs, establishing a program for energy conservation and efficiency, adopting green building and water conservation practices as well as new landscape standards, and reducing greenhouse gas emissions. The client was the San Joaquin City Planning Department and an advisory group of residents. A Community Plan was prepared to assist City staff in guiding future development in San Joaquin and creating optimum levels of services, economic activities, and quality of life for residents and visitors.

Figure 9
San Joaquin Community
Plan, Fresno County;
CRP 552-554.



**Pismo Beach Community Plan.
Graduate studios CRP 552 - 554, Fall 2010 - Winter 2011.
Instructor Chris Clark.**

In cooperation with the Pismo Beach Planning Department, students developed a Community Plan to assist City staff guide future development in Pismo Beach. The focus was on the development of a Parks and Recreation Element and an Open Space Element. Challenges addressed included accommodating future growth, striking a balance between full-time residents and the large influx of tourists and part time residents, increasing parks, and enhancing recreation opportunities.

Attachment 1

BCRP CORE STUDIO SEQUENCE

Core Studio Classes	201 (f)	202 (w)	203 (s)	341 (f or w or s or su)	410 (f)	411 (w)
Scale	Site	Block	Urban Design Plan 6 to 12 blocks	Specific Plan, 12 plus blocks	Community Plan	
Problem	One site	Part of Block	Corridor Urban Design, Downtown, Urban Infill / Revitalization	Green Field, Urban Infill / Revitalization, Implementation	Community analysis	Plan development
Comprehension / Critical Thinking / Integration	Read Plans/Make Plans	Design Site Plans, topography, bldg. footprints, shape public space, visualization	Urban design, land use, circulation, writing strategies, design guidelines / codes, visualization	Address elements of a Specific Plan, phasing, implementation, design guidelines / codes	Address elements of a community plan, phasing, implementation, long term strategy development	
Conceptual Framework and Readings	Read, Laseau, Ching on methods	White, Lynch (site planning), LaGro, Porterfield,	E. White site analysis, Sucher city concepts, Allan Jacobs, Leinberger, Community Design literature	OPR Guide to specific plans, Berke et al., Community Design literature	OPR Guide to general plans, Chadwick, Gotschalk, Lynch, Kelly & Decker	
Methods & Skills	Develop and Read Plans, over-the board drafting, basic image manipulation and graphic layout, basic 3D modeling	Design a Plan, Site Plan, Topography, BluePrints, parking, over-the board drafting, page layout, intermediate 3D modeling, basic graphic design, writing, visualization, basic plan document development	Basic Community involvement, land use, circulation, design guidelines, visualization, CAD, page layout, advanced 3D modeling, graphic design, writing, visualization, plan document development	Community involvement, land use, circulation, design guidelines, Capital Improvement costs, phasing, environmental issues, visualization, writing, visualization, plan document development	Community involvement, land use, circulation, population projections, writing, visualization, plan document development	Land use, circulation, design principles & guidelines, implementation, phasing, writing, visualization, plan document development
Client	Scenario	Scenario	City / redevelopment agency / nonprofit / scenario	City / redevelopment agency / nonprofit	City / redevelopment agency / nonprofit	
Products	over-the-board drawings, urban design portfolio, 3D model, animation	Team plan documents, team poster, 3D model, animation	Team plan documents, team posters, 3D models, animations	Team plan documents, team posters, 3D models, animations	Technical Background Report	Class Plan Document

Attachment 2

MCRP CORE STUDIO SEQUENCE

Core Studio Classes	512 (w)	553 (s)	552 (f)	554 (w)
Scale	Site	Specific Plan, 12 plus blocks	Community Plan	
Problem	One site	Green Field, Urban Infill / Revitalization, Implementation	Community analysis	Plan development
Comprehension/Critical Thinking/Integration	Read Plans/Make Plans/ Make maps	Address elements of a Specific Plan, urban design, implementation, phasing, design guidelines / codes	Address elements of a community plan, phasing, implementation, long term strategy development	
Conceptual Framework and Readings	Read, Ching on methods, Tufte on presentation	OPR Guide to specific plans, Berke et al., Allan Jacobs, Leinberger, Community Design literature, Lynch	OPR Guide to general plans, Chadwick, Gotschalk, Lynch, Kelly & Decker	
Methods & Skills	Develop and Read Plans, over-the board drafting, basic page layout, CAD, basic 3D modeling, GIS	Community involvement, land use, circulation, design guidelines, Capital Improvement costs, phasing, environmental issues, visualization, writing, visualization, plan document development	Community involvement, land use, circulation, population projections, writing, visualization, plan document development	Land use, circulation, Design Guidelines, Design Principles, Implementation, Phasing, Environment, writing, visualization, plan document development
Client	Scenario	City / redevelopment agency / nonprofit	City / redevelopment agency / nonprofit	
Products	Over-the-board drawings, urban design portfolio, 3D model, animation, GIS maps	Team plan documents, team posters, 3D models, animations	Technical Background Report	Class Plan Document



Scott Harmstead received his BCRP from CalPoly in June 2006. He is a Planner III for the Madera County Planning Department, where he focuses on community planning and grant management. He has been actively involved in planning for rural and low income communities.

Note:

This article is based solely on an individual's observations in Delhi, India over a five-week period, and does not represent a complete picture of the city.

DELHI, INDIA THROUGH THE EYES OF AN AMERICAN PLANNER

SCOTT HARMSTEAD

Scott Harmstead, a recent graduate from CRP's BSCR program, writes about his recent trip to Delhi, India, under the sponsorship of Rotary Club's Group Study International Program. The trip exposed him to the effects of over-population, rapid growth, lack of resources, and cultural conflicts in Delhi but also to the immense potential represented by a hard-working, forward looking, and entrepreneurial population with a culture that reaches back to millenia.

My childhood images of India were limited to popular myths such as marching elephants and people experiencing sacred bathing rituals in the Ganges River. My actual visit to Delhi proved how naïve my images were, and how incredibly diverse, complex, and at the same time modern and traditional, that city and India can be. Roughly on the other side of the world from California, Delhi is India's second largest city and the seat of national government, with a population of about 18 million people in 2010, but census figures indicate an increase of about 1 million a year! As my plane flew into Delhi I was astounded by the city's morphology, a patchwork of streets including everything from perfect grids to organic almost medieval types throughout the sprawling metropolis. Delhi is caught between straight-lined and right-angled western urban development, the complex layers of thousands of years of local culture and religious expressions, and an extremely large and dense population, most of it living in severe conditions of scarcity. As a planner working for a local County government in California, efficiency and organization was my mantra, and I was familiar with large cities such as New York, Paris, Buenos Aires, and many other western metropolises. However, Delhi revealed to me a whole different world where east and west, north and south meet.

I had been selected as a member of a team of young professionals to be sent to India as part of the Group Study Exchange program, or GSE, an international service program sponsored by Rotary International. The program focuses on three core aspects: vocational exchange, cultural exchange, and Rotary humanitarian projects in the country visited. When the trip was confirmed, I surfed the internet filled with the curiosity of a child, scrolling through the history, maps, religion, and culture of a completely foreign history, way of life, and way of thinking. I pulled up Google Earth and panned over Delhi, its jam-packed streets and open spaces as gaps in the midst of buildings of all shapes and sizes. Juxtaposed with this apparent organic urban tissue were broad boulevards in park-like settings leading to spacious roundabouts. The maps and images revealed a cityscape seemingly fused between old informal urban development probably reflecting local culture in ways that were totally foreign to me. and a western penchant for efficient street systems and uniform building setbacks.

After traveling on multiple airplanes for a combined 24 hours, our team of young westerners arrived in Indira Gandhi International Airport. The airport's cleanliness and order gave way as soon as we reached the exit and our guides quickly jammed us through an opening in the dense crowd outside, including the pack of shouting cab drivers, overseen by machine gun-strapped security guards that keep the crowd from the doors. Outside, motorized rickshaws, buses, and taxicabs came ripping out of the thick fog (Delhi is shrouded by a cool fog in January, much like California's Central Valley). The night pulsated with an incessant barrage of shouts, honks, beeps, roaring engines, and whistles.

As we gazed upon the confusing scene of bustling traffic and honking vehicles, we were whisked onto the Delhi flyovers (known as freeways in California). In comparison to California drivers, we were surprised by the lack of respect for basic traffic laws. The six-lane flyover became eight or nine lanes as smaller cars

and motorbikes fit in between trucks, on the side of the road, or just simply split the traffic lanes. Honking is the preferred method of alerting other drivers of your presence and parking is allowed anywhere there is room. Motorbike helmets are required for motorbike drivers (but not for Sikhs on religious grounds as they are required to wear a large cloth turban at all times); yet carrying your baby in one hand while driving your motorbike seems acceptable.

Around midnight in our jet-lagged stupor, we stumbled into the Vikram Hotel, which is located in the Defence Colony, a neighborhood largely built and settled after the Partition (the violent division of the country at Independence into two separate countries named Pakistan and India in 1947). The hotel property is gated with at least one armed guard designated to inspect incoming vehicles. Most of the residential properties in the Delhi area are surrounded by fences or solid walls for extra security but result in an extremely unfriendly pedestrian environment. This is particularly true in areas developed after the Partition. A typical street cross section can be described as a security wall, a short strip of dirt for parking and walking, pavement with travel lanes, and the same repeated on the opposite side. The key difference denoting wealthy neighborhoods from lower to middle class neighborhoods is the presence of tree - a myriad of shade-giving trees including beech, chestnut, Indian cork, and an assortment of other species from semi-tropical and temperate areas.

I was greeted with the soft coos of pigeons on the first dawn in Delhi. Excited, I opened my blinds to a foggy sky and, looking upon trees below, I was surprised to behold a dull green hue. It turns out that the city's dry season from October through June robs the city of Mother Nature's cleanser—rain. As I was escorted by my first Indian host, Ravi ("sun" in Hindi), in a Toyota Corolla, I noticed the thick dust or soot covering everything in sight. A number of sources, including the World Bank and many international firms, rank Delhi as one of the most polluted cities in all of Asia, including China. Everything seemed to fade in and out of the sooty fog as Ravi drove along. Trees merged into a gray blur as cows, bicycles, motorbikes, road side stands, and little campfires came in and out of focus—it all seemed like a dream.

I was assigned to stay with Ravi and his wife Jyotsna ("veiled moon" in Hindi), because of our closely related professional backgrounds. Ravi is an architect and Jyotsna a landscape architect. A key component of the exchange program involves vocational time to learn of your profession in a foreign country. Ravi turned to me in my jet-lagged stupor

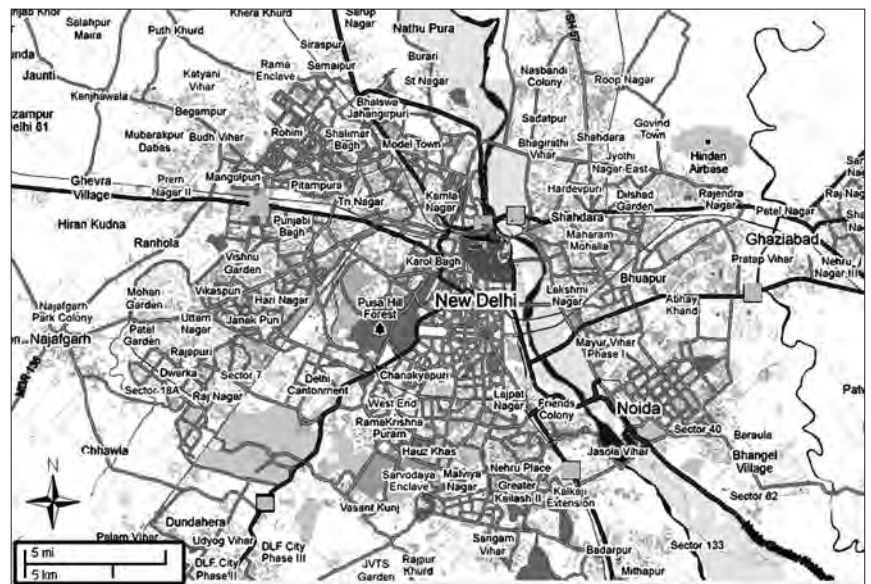


Figure 1
Map of Delhi, showing the original new town grid designed by Edwin Lutyens from 1912 to 1930 as the capital of the British Empire in India.

Figure 2
The center of Delhi, showing one a building designed by E. Lutyens. (photo by the author)



and asked, “have you heard of Habitat?” I must confess I didn’t have a clue what he was referring to, but learned that it is a branch of the United Nations organization that mostly deals with housing. Off the throbbing Delhi street Ravi turned into a large gate and into a compound with a number of large modern buildings huddled together. Ravi explained to me that this was an innovative mixed use hub fit with an event center, hotel, theatre, and restaurants. Beyond Ravi’s description of the Habitat Center, I later came to find out that the Center has an overall goal to promote environmentally- and people conscious development, involving a number of institutions to further this goal—definitely a worthy mission in a country faced with seemingly insurmountable hurdles to sustainability.

The next vocational opportunity came a few days later with a visit to Dwarka, a master-planned suburb of Delhi. After becoming a bit more acquainted with navigating old Delhi’s seemingly haywire street system, the streets all of a sudden gained a Western suburban uniformity. We pulled off a main arterial and stopped at sign labeled “Delhi Development Authority, Sector 6” where a map showed the land uses within the sector. This “sub-city” comprised 29 sectors, each sector housing roughly 60,000 people complete with recreational space, schools, commercial services, and other services needed to support each sector. The Delhi Development Authority ensured that Dwarka was planned well in advance with metro connections, police, fire stations, sewer, water, and other services generally accepted as basic in the United States. Driving into Sector 6, we pulled off the road beside an empty lot overlooking most of the development area. As I looked out over a large park gazing at the uniform rows of residential towers, I could not help thinking of a future such as those portrayed in sci-fi novels where the “unclean” outside world is kept separated from an egalitarian society living in an environment developed to ensure uniformity.

As we navigated the city’s tangle of streets and flyovers back to Ravi’s home, I noticed new construction everywhere occurring at a frenzied pace—whole streets closed, pathways dozed through developments, columns lifting up new rail lines, stones ready to be installed for new curb and gutter, and new sidewalks. Ravi revealed to me that all the construction was for the Commonwealth Games, a sporting event held between 54 nations, all a part of the former British Empire. Throughout my stay in Delhi, all of my hosts and drivers would talk proudly of the games, and the selection of the city to hold them was India’s first opportunity to host this major event, renew the capital, and show off a new image to the world. I was witnessing a city being transformed: grand sidewalks, massive sporting and event centers, improved transportation with extended flyovers and, most importantly, the Delhi Metro. Actually, when engaged on a conversation with any Indian on the subject of the

Figure 3 & 4
Dwarka, a gated
master planned suburb,
developed by the Delhi
Development Authority.
(photos by the author)



Delhi Metro, a feeling of pride was obvious in the ability to undertake such a feat ahead of schedule, under budget, and without any accusations of corruption involving politicians that usually inundate the media there.

To me, as a Californian planner not accustomed to that intensity of development, nonstop traffic, noise, pollution, and new construction, Delhi resembled chaos. But underlying any conversation with an Indian about these everyday problems was a sense of surety about a bright future—that these “problem” areas are a necessary inconvenience on the way to a promising future. The general sentiment among Delhiites is that a path is currently being laid for India to become an industrialized nation much like the United States, with a higher quality of life and all of the economic benefits therein.

Indeed, as I look back, I see a country with a bright future. India is full of young people, plenty of entrepreneurship, and a fertile business environment. While a positive sentiment does exist in regards to India’s future, a serious question remains to how urban growth will take place. Just how will India provide for better living and housing conditions for its booming population of nearly 1.2 billion (three times that of the United States), and not only the poor, but the new middle class as well? As far as Delhi is concerned, the recent population trends involve massive migration to the city in hopes for work and a better life. Delhi is a metropolis facing a population growth that is expected to be 46.31% by the end of the year --double the country’s rate-- and there are about 1,000 new cars in the streets every single day! Almost 20% of Delhi’s population lives in slum, and the health care and support infrastructure is not enough for, and evidently is unable to grow at the same rate as, the population. The unstoppable population increase—both by migration and birth— and the incredible influx of cars seem to me to be the most difficult planning issues in Delhi.

With all of the City’s rapid growth and new found wealth, the division between a large segment of the city, the working poor, and the middle to upper class had become ever more apparent. For instance, near construction sites makeshift shacks lined the road which my hosts indicated belonged to transient laborers from the poorest parts of India in search of work. As the laborers came and went their features were noticeable—some of their faces were covered in dust, no one smiled, many were without shoes, and many carried loads of materials in large baskets or in stacks on their heads. The migrant laborers on the fringe simply have yet to be accounted for, much less managed.

The government is left attempting to provide essential services such as clean water, sewer, electricity, and decent roads. Meanwhile, at a much faster pace, new slums and labor camps keep emerging in forgotten corners and edges of the city, and many lack those essential services. And as I reflect on my stay in Delhi, I realize the true reason for a place like Dwarka and all of its benefits for those living there. This development might be an exception to the rule, but it is a good demonstration project of what the government would like to attain. For now, the limited amount of resources and the lack of affordability limit more places like Dwarka from becoming a remedy to many of the urban problems affecting Delhi’s population.



Figure 5
Poor children collecting drinkable water from a community tap to take home. (photo by the author)



Melissa Cole Streder received her BSCRCP from Cal Poly in 2008. She worked at Soga & Associates, KTG, and Marin County Community Development Department, and in the last few years she has been working as a transportation planner for Caltrans in San Luis Obispo.

LIFE BEYOND CRP

MELISSA COLE STREDER

Working at Caltrans as a systems planner for the San Luis Obispo and Santa Barbara counties, Melissa Cole Streder discusses her job and her professional trajectory since graduating in 2008, noting the importance of her internships and the experience she gained with the community outreach projects at CRP.

So much has happened since I graduated from Cal Poly's City and Regional Planning Program (CRP) in 2008. Plan as I might to control the direction of my life after college, the path that I ventured was anything but predictable and nothing further from the career aspirations I initially had for myself. I envisioned working for a private urban design firm or an environmental planning firm in a big city someday, but the reality of what was to come was quite the opposite.

Like many graduates today, my first full-time job opportunity in planning did not come right away. It took over six months to get a job, and it wasn't for a lack of trying. I must have filled out over thirty job applications to planning positions of every kind and all over the United States. I applied to everything from a low-income housing nonprofit organization in San Francisco to a large urban design firm in Colorado and everything in between. Deep down I had aspirations for a certain type of planning job, but I was willing and just about did apply to any planning position that I could get my hands on, even if I was only remotely qualified.

I wanted to get my foot in the door to gain some real life experience working in a planning capacity, and I was willing to go anywhere to get it. I was convinced then as I still am today that in this economy there is no room to be picky about what type of planning jobs you apply for. Apply for everything. What do you have to lose? The worst that can happen is that you get offered a job and have to say no.

This was my attitude as I applied and interviewed to jobs again and again and visited planning firms and public agencies. Numerous times I visited planning firms and departments, lobbying for a position or at least the opportunity to leave them with my resume and work samples. I was determined not to let the excuse of a bad economy stop me from getting a job. I put myself out there and, with persistence, it eventually paid off with a full-time job.

However, I also kept myself open to internship opportunities that would provide me with some experience and show my future employer that I was serious about planning. Just a few months after leaving Cal Poly, I was selected for an internship opportunity with the County of Marin Community Development Department. This experience provided me insight into how local government functions as well as a new perspective toward community outreach. I was hired primarily to assist with the development of the Department's Local Coastal Plan (LCP) update, specifically aiding in the organization and facilitation of community workshops for this effort.

The public outreach experiences I had in my CRP studio classes at Cal Poly prepared me well for planning and executing the LCP workshops. The logistics associated with organizing the public workshops went off without a hitch. However, when it came to the facilitation of these workshops it became apparent, "I wasn't in Kansas anymore." Marin County people were nothing like people from Traver or Nipomo (the communities I worked with in my CRP studio classes). They were definitely a different demographic of people--very vocal, wealthy, and highly educated. Having the opportunity to work with the communities of Sinton Beach, Muir Beach, and others along the Marin County Coast provided me with new perspective and equipped me with more tools for my planning toolbox.

This internship was action packed but short lived. Just a few months into my internship I got the call that would be a big life changer. As I was on my way home from Marin, ironically sitting in bumper-to-bumper traffic on the I-580 in Richmond, I received a call from the California Department of Transportation (Caltrans). No they were not calling to rescue me from my two-hour commute back to the East Bay, but to offer me a full-time transportation planning position in their District 5 San Luis Obispo office. Accepting an opportunity to move back to San Luis Obispo and gain full-time planning experience was an easy decision.

I had no idea of what was in store for me at Caltrans, but I looked forward to learning more about what the job entailed. My recollection of transportation planning from college was that it was very technical, as I remembered past assignments standing at intersections counting cars and calculating turning volumes. I quickly discovered at Caltrans that while there is definitely a technical side to transportation planning, there is a strong political dimension as well.

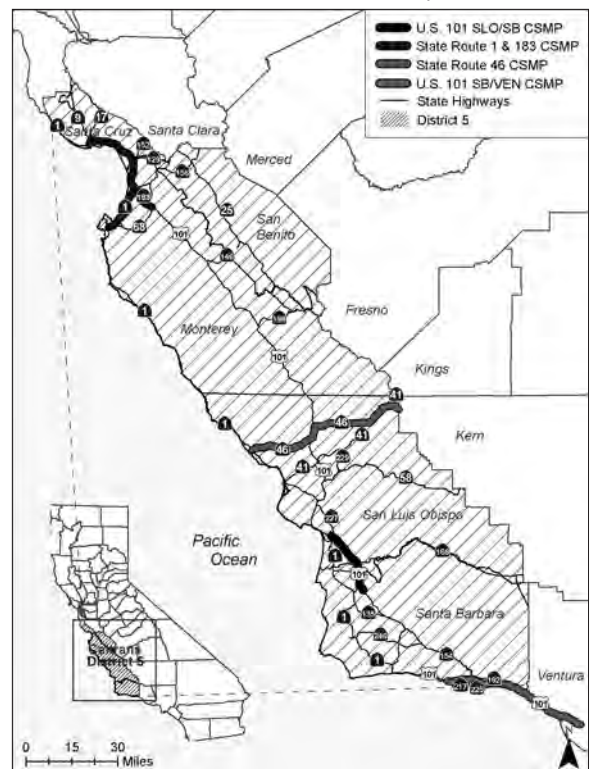
Just like working for a city or county planning department, there are many political factors guiding the decision-making process. However, in planning for the state transportation system, the scale of these factors is magnified. As one can imagine, maintaining mobility across California for the transportation of goods and people is a huge job. How the state transportation system is managed now and in the future will have direct impacts on local, state and national levels.

Needless to say, the size and complexity of the state transportation system is considerable. The Department of Transportation is divided into 12 districts that receive direction from the Caltrans headquarters office in Sacramento, who make sure that state and federal transportation policy decisions are implemented. The districts then make this happen working internally and with regional and local agencies to implement these policies.

At District 5, we maintain and operate 30 state and federal highways from Santa Barbara County to San Benito County, including those in the counties of San Luis Obispo, Monterey, and Santa Cruz. The District is made up of multiple branches composed of many units which include maintenance, construction, traffic operations, traffic safety, landscaping, design, project management, engineering, and planning. These are just some of the many units that make up each Caltrans district. I work in the Planning and Local Assistance branch, where there are multiple subunits. These include: Environmental Planning, Intergovernmental Review, Systems Planning, Regional Planning, and Advanced Planning. Additionally, each planning group has staff assigned to geographic areas within the District. Confused yet?

For the past two years I have worked as a Systems Planner in San Luis Obispo and Santa Barbara counties. The primary duty of a systems planner or long-range planner is to keep the 30 Transportation Concept Reports (TCRs) for each highway in the District up to date. Transportation Concept Reports for highways are similar in some respects to general plans for local agencies. They offer qualitative and quantitative information about each highway as well as a long-range concept for the route. I like to compare updating these documents to painting the Golden Gate Bridge: once it is finally finished, you have to start over again from the beginning. So many TCRs necessitate that we will be continually updating these documents.

Figure 1
Caltrans District 5, San Luis Obispo.



In Systems Planning we also have corridor plan assignments that trickle down from Caltrans Headquarters periodically. The latest and greatest assignment has been Corridor System Management Plans (CSMPs). In 2006, with the passage of Proposition 1B, funding was programmed to the Corridor Mobility Improvement Account (CMIA) for highway projects across the state. As a condition of the funding, the California Transportation Commission (CTC) required that a CSMP would be completed for all projects in the state that received CMIA funding.

Within District 5, CMIA funding has been programmed for four projects. I have been involved in all four of these projects in different ways, whether through providing GIS assistance, writing sections of the document, or facilitating team meetings. Currently, I am the lead on the CSMP effort for the Santa Maria River Bridges Widening CMIA project located on US 101 at the Santa Barbara/San Luis Obispo county border. The CMIA project will widen the current four-lane bridge to six-lanes and add a Class I bicycle path. The CSMP itself will extend from Clark Avenue on US 101 in Santa Barbara County to Grand Avenue in Arroyo Grande.

Working on Corridor System Management Plans for the District has been a rewarding experience that allowed me the opportunity to use some of the tools from the planning toolbox that I acquired during my time in the CRP program at Cal Poly. As I look back at that time, I feel especially grateful for the opportunities I had in my studio courses to “learn by doing” and expand my social and team working skills through working collaboratively with others.

have found that in my current job, being able to communicate with people and work collaboratively is one of the most valuable and essential skills I could have. Due to the size and complexity of Caltrans, it is rare that I ever work on a project entirely by myself. I am constantly running projects by people in different units and

up the ranks of management in my own unit. Often, as is the case with the CSMPs, I also commonly need to coordinate with representatives from local cities and counties, transit agencies, and Metropolitan Planning Organizations (MPO’s) to get a job done. It has become more and more apparent to me that to be an effective planner you have to be an excellent listener and communicator.

This was one reason I advocated chartering a Toastmasters club at Caltrans District 5. Toastmasters clubs exist all over the world with a mission to help individuals develop better leadership and communication skills. Our club SLO Motion Toastmasters was officially chartered just over six months ago, and it offers weekly one-hour meetings for members to exercise prepared and impromptu speaking. Through my involvement in this club, I have become a better, more confident speaker and have had the joy of watching my colleagues and friends improve their speaking abilities as well.

suspect that my involvement in Toastmasters factored into the decision by upper management in Caltrans to transition me into Regional Planning from Systems Planning beginning January 2011. As the new Regional Planner for Santa Barbara County, I serve as the liaison between Caltrans, the Metropolitan Planning Organization (MPO) for Santa Barbara County, and the Santa Barbara County Association of Governments (SBCAG). I facilitate state funding for SBCAG and provide support on Regional Transportation Plans (RTPs), Overall Work Programs (OWPs), and transit studies. I also

Figure 2
Muir Beach vista point.
(photo by the author)



represent Caltrans as a voting member on the SBCAG Technical Transportation Advisory Committee (TTAC), working with public works directors from local agencies in Santa Barbara County. In this capacity I spend much more time outside of the office working face to face with local and regional decision makers. Without my involvement in Toastmasters, and the opportunities it has given me to practice and improve my public speaking skills, I would not have had the confidence needed to excel in my new position.

The last two years have been a whirlwind of big steps and new experiences, and I couldn't feel more blessed that I was one of the lucky ones who was able to get a job in planning and stay in San Luis Obispo. If there is any advice I would give to upcoming graduates, it would be: don't let a bad economy be the excuse but the motivation to be persistent and exhaustive in the manner of how you pursue opportunities to grow. This can be through an unpaid internship, additional training, an interview, or visiting a firm. The full-time job opportunity may not be at the tip of your fingers, but if you are willing to give it your all, the job will come in time.

If you have a positive attitude and perseverance, it is not a matter of if but of when. And remember, the means to an end goal is part of what makes the journey so great, so don't forget to enjoy the ride. I wouldn't change my path from graduation to where I am today for the world. Sure, there were times when I was stressed and anxious about finding that full-time job, but you should feel comfort in knowing that this is something everyone goes through and is just temporary. Also remember to apply for everything. I have been encouraged just in the last few months that three of my CRP colleagues and friends were selected for full-time jobs with different transportation planning agencies across the state. Even if the position doesn't sound like your dream job initially, it can at least serve as a stepping-stone to something else in the future. Go for it, and you may be pleasantly surprised with the outcome. I know I was.



Jason Kambitsis received his MCRP from CalPoly in 2008. He works as a Senior Planner in the Department of City Planning, Pittsburgh, PA and is a contributing editor of a the web magazine "Wired".

WHAT I DIDN'T LEARN IN GRADUATE SCHOOL

JASON KAMBITISIS

Jason Kambitsis, a graduate from CRP's master's program, is a successful planner working with the City of Pittsburgh and publishes frequently at the Wired Magazine. In this article he writes about his introduction to the profession, and suggest eight guidelines that young planners should know about.

Getting my Master's in City and Regional Planning from Cal Poly was ne of the best decisions I have ever made. I learned that there are people that truly get excited by the same nerdy subject matter that I do, and you can call a Lexus an environmentally friendly car just by creating a vanity plate for it (sorry Paul Wack!).

eyond this I learned that even after working with all of the great professors and the time that we as students put into understanding planning there is still more to learn. Sure, Graduate School is great at giving you an in-depth understanding of the City Beautiful Movement and how it has shaped the modern city. But there is no textbook, no class you can take that gives you the perspective that working in the field does.

Graduate School gave me a lot. The rest I learned on my own. There are some standard tips everyone needs to follow when getting a job. Wear a suit for interviews, look people straight in the eye, be respectful to those you work with, etc. But, there is still more that you need to know about planning to help you set off in your career and to stay successful as a planner. Here are eight guidelines every planner will either think about or be confronted with in their career.

1. Process, is process, is process. When I was in school I actually worried that when I started my next job I would not be able to do it effectively because I was not versed in every aspect of planning departments, mostly the process of paperwork. But, once I gained understanding of the general principles behind the bureaucratic jungle of governmental planning , I was able to apply these principles anywhere. I recommend you sit in on Planning Commission hearings when you can. Show up to the local governing body such as a City Council when they have land-use related hearings so you can see the ins and outs of this field. Once you know where and why a project starts and ends you will be able to transfer that knowledge anywhere.

2. Work for free and view it as a real job. Graduate school is one of the few times that you can work for free and you are not viewed as a slacker (someone who works for free seems like the opposite of a slacker). If you have never had any experience in the field, talk to a local department and ask what options they have for internships. Get in there and work as hard as you can. These people will be writing recommendations for you. If you do well they will help get you a paid job, or perhaps even retaining you as one of their own employees. Internships are the stepping-stone for your next career move. Those who get them and work hard at them find jobs more easily and advance more quickly. It's as simple as that.

3. If you want to make a lot of money go do something else. True if you want to be a millionaire by 30. But planners do well. Actually planners have a higher median income than most Americans. Plus this is America, the land of opportunity; with your new planner skill set I am sure you can figure out a way to make the money tree grow.

4. Work for government. This is probably the best move any new planner can do. After a few years you will understand how a municipal planning department works. This is good if you want to advance in government or go into the private field. Since governments make most of the contracts they like to hire people who have sat in their seat and understand how to work through a bureaucracy. It's a no-lose situation for you.

5. Not all planners or departments think the same way. This can be a hard reality for anyone in planning. Just because some of my colleagues and I commute by bike doesn't mean everyone else in the office does. Before you pick a job, or even start the hunt, make sure you are going into a place that you are comfortable with and will fit into. A good work environment in a community that values your viewpoint will make a huge difference in the quality of work you do and the satisfaction you get from it.

6. Be objective. The days of a professional dictating the utopian dream to the public is over. Modern planning is based around a collaborative effort. You are a professional, not a dictator. This can be hard, but you need to keep your personal feelings out of the decision-making process and go into any situation with a clear head. People will notice and respect you for it. And in the end you will be a more effective planner and asset to your community.

7. Know the community you work in. When you start working at a new place get out there and explore it. Walk, bike, and drive the streets to meet as many people as possible and start identifying problems and solutions. Inevitably questions will start coming at you from all over the community. You will need to be a resource on everything going on and the history of your place. Also, read your local paper every day. It is a great way to know what is happening. People will expect you know what is going on, especially if you work for the government.

8. Treat everyone the same. It doesn't matter if the person is putting a shed in their backyard or creating or investing \$100 million in a local community. Treat everyone the same and you will earn the respect of the community and your peers.

So here it is. Is there more information I could give you? Sure. Will things be different for everyone? You bet. But wait and see. All of these guidelines for planning practice will confront you either when you are starting to look for a job, or after you started, enjoy.

THESES AND PROFESSIONAL PROJECTS ABSTRACTS

MASTER OF CITY AND REGIONAL PLANNING, CAL POLY SAN LUIS OBISPO

As the concluding phase for the Master of City and Regional Planning, the CRP department offers the student a choice between a final comprehensive planning studio, a thesis, or a project with a real client. The following abstracts are from master's theses and projects approved between April 2010 and April 2011, and are available to download from Cal Poly's Kennedy Library website.

Piedras Blancas Motel Feasibility Study and Redevelopment Alternatives Gordon Douglas Anderson

The Piedras Blancas Motel is a 1950's era roadside motel located seven miles north of San Simeon and nine miles south of the San Luis Obispo/Monterey County line. It comprises 11 lodging units plus a cafe, laundry room, manager's apartment, and adjacent storage area. In 2005, the property was purchased using State, Federal, and private funds, and then transferred to the California Department of Parks and Recreation (State Parks). Although it has been closed to the public since 2005, the site offers day-use parking and convenient beach access. This professional project, under contract with the California Coastal Conservancy, provides information necessary for the future redevelopment of the Piedras Blancas Motel. It demonstrates the feasibility of a preferred development alternative through several analyses including: a structural analysis of the existing building(s), a constraints analysis, an evaluation of regulatory requirements, and an assessment of redevelopment options based on preliminary market research and financial analysis. The primary objective of the Coastal Conservancy and State Parks is to provide low-cost overnight lodging and visitor services along the Big Sur Coast. The Motel would serve as an alternative to existing expensive lodges or resorts as well as existing tent or RV camping that may not serve as an option for some visitors.

Water Conservation for the County of San Luis Obispo Dimitri Theodore Antoniou

This master's professional project was requested by the County of San Luis Obispo to assist in its water conservation efforts and to help achieve a 20 percent per capita reduction of water use by the year 2020. It consists of a Handbook of Water Conservation Technologies and Practices (Handbook) and the Background Report for the Water Conservation Handbook (Background Report). The Handbook is organized based on Indoor and Outdoor water uses, and includes information on the type of technology, the benefits in terms of water saving potential, and the cost of implementation. It provides a quick guide to various water-conserving fixtures and appliances for developers and residents throughout the County. The Background Report is a supplemental document for the Handbook providing more in-depth descriptions and examples on each technology, besides a history on water conservation issues in California and San Luis Obispo. It looks at two case studies: on the water conservation efforts in Phoenix, Arizona and a plumbing retrofit project on the Cal Poly Campus awarded with a LEED certification for its water savings. The Background Report looks deeper into the use of community participatory planning in two water conservation plans: a Community Plan development in Arroyo Grande, California, and an Integrated Regional Water Management Plan in the Greater Los Angeles Region. The Background Report concludes by providing some cautionary advice on water conservation technologies and provides future recommendations for the county of San Luis Obispo to improve its water conservation efforts.

Assessing Potential Industry Growth for Economic Development in Oakland, CA

Sonia Aery

The City of Oakland has 42,000 people in its labor force who can be classified as the “working poor.” In the last decade’s recession, Oakland lost thousands of jobs, a phenomenon that makes the implementation of economic development strategies increasingly difficult. This study prepares a set of career ladders for long-term progression pathways to help individuals advance, particularly in high wage, high growth careers ladders for the population of Oakland.

Greywater as a Method of Water Conservation in Arroyo Grande

Danielle Castle

The purpose of this professional project is to address the practical implications of decentralized greywater usage in the City of Arroyo Grande. This professional project consists of two products: a brief greywater Guide for the City and a Background Report. The Guide, intended for city planners to use for general information about greywater systems, addresses Arroyo Grande’s potable water shortage, the definition of greywater, the advantages and concerns about its use, the plants that are tolerant to it for irrigation; appropriate detergents for a greywater system; and a summary of the California greywater law. The Background Report discusses the City of Arroyo Grande’s potable water conditions and how its water supply will be affected by growth; it is estimated that by the year 2030, Arroyo Grande’s water demand will outgrow its water supply by 283 acre feet. Three case studies examine how water scarcity has prompted the successful use of greywater: the Hashemite Kingdom of Jordan; the Casa del Agua project in Arizona; and a local study in Santa Barbara, California. The report concludes with California greywater law, and how the recent change in August, 2009 has greatly increased the legal accessibility of greywater reuse as a method of water conservation. In combination with education and outreach among city officials and residents, greywater has the potential to play a major role in water conservation in Arroyo Grande.

Franklin Boulevard Redevelopment Project Area Market Analysis

Joshua Chapman

This market analysis of the Franklin Boulevard Redevelopment Project Area is divided into four sections: planning context, real estate market conditions, emerging market opportunities and case studies, and a conclusion. The data and the creative examples gathered are meant to contribute to the efforts towards the transformation of the area into a premier “urban” destination in the Sacramento Region, serving to aid stakeholders of the Franklin Boulevard Redevelopment Project Area, including residents, business owners, the City of Sacramento, County of Sacramento, Sacramento Housing and Redevelopment Agency (SHRA), and the North Franklin District Business Association (NFDBA).

Alternative Methods and Forums to Optimize Public Participation in the Planning Process

Joseph James David

The primary vehicle for local government participation is the public hearing, which is a formalized process that often elicits one-way communication from planner to public. This study reports that this process does not provide the necessary community involvement in decision-making. Alternative methods, such as workshops, are explored that break the formal mold of local government participation. Findings indicate that participation is more genuine in a loosely structured setting where face-to-face communication can occur between public and planner and among members of the public themselves. However, findings also suggest that genuine participation is not always appropriate given the intent of a public meeting. Many hearings are held at the end of the planning

process for development applications requiring quasi-judicial decisions based on standards. The key is getting public input on earlier legislative decisions about policies that define the standards themselves. This study concludes with a toolkit of techniques practitioners can use to enhance public participation, and observations about appropriate stages to implement these techniques in the planning process.

City of Davis Greenbelt Master Plan

Brandon Haydu

During the current update of the City of Davis' Parks and Recreation Facilities Master Plan, greenbelts were identified as a highly used and desired facility. This Greenbelt Master Plan is focused on the opportunities that greenbelts can provide as recreational and transportation facilities. The background studies included the analysis of community feedback, greenbelt coverage and capacity, as well as existing local, state, and federal design guidelines. The final plan aims at improving the greenbelt infrastructure in Davis through the year 2020 by utilizing a set of goals, objectives, policies, and programs, along with a greenbelt map.

City of South Lake Tahoe Subdivision Ordinance: An Opportunity for Smart Growth, Sustainability, and Application Streamlining

Hilary Kay Hodges

The City of South Lake Tahoe currently does not have an adopted subdivision ordinance. This has caused confusion about the approval process and regulatory requirements as well as delays in application processing. This Master's Project explores the opportunities created by a subdivision ordinance that implements the City's General Plan and its smart growth and sustainability policies. Careful consideration was given not to achieve a streamlined process as well to not generating any cost increases associated with additional fees or off-site improvement requirements. This study was informed by a literature review on subdivision regulation and the regulatory environment in South Lake Tahoe as well as by consultation with other professionals. The final product is a draft subdivision ordinance and an analysis of how well the draft achieves the set goals.

Mixed-Income Housing: Assumptions and Realities

Kimberly M. Hoving

Current Federal, State, and local San Francisco housing policy advocates mixed-income housing as a positive approach to creating living environments for low-income families. Strategies for creating mixed-income housing environments include large-scale public housing re-development efforts, inclusionary housing policies, and the use of discretionary funding for mixed-income development projects. Researchers agree that there is not yet enough evidence to support that mixed-income strategies are achieving positive results and have noted that the expected outcomes for mixed-income strategies are founded upon a number of assumptions. It is assumed that a mix of households at varying income levels will result in greater stability, improved access to services and resources, opportunities for social networking, and greater social control leading. This study addresses the root of these assumptions and presents findings regarding the perceived success of mixed-income development in realizing desired outcomes. Results are presented based on in-depth interviews with housing industry experts. This study aims to provide a clearer picture of why mixed-income development has gained popularity and how the strategy may be better understood and utilized in future housing development.

Orizaba Urban Design Plan

Timothy J. Kelly

Located in central Long Beach, California, the Orizaba Design District was heavily influenced by the Pacific Electric Railroad that cuts through the area. Because of the railroad and its proximity to the Port of Long Beach,

it became mostly dedicated to industrial use until 2007 when a small group of business owners--including architects, graphic designers and interior designers--started to locate there, mainly along Coronado and Gladys avenues. These investments spurred further development and led to the realization of the area's potential to become a unique Design District. The Orizaba Urban Design Plan seeks to provide the City of Long Beach and local business owners with design guidance that capitalizes on development opportunities. The plan envisions Orizaba as a safe, pedestrian-friendly district that builds on the city's character. It incorporates site analysis and community participation into conceptual development, refines it into the plan's objectives for land-use and circulation elements, and explores sustainable design principles, particularly low impact development. A form-based code translates the plan's objectives into clear design standards including building envelopes, streetscape, visual quality, signage and way-finding, and street furniture.

Perceptions and Evaluation of an Urban Environment for Pedestrian Friendliness:

A Case Study

Elizabeth H. Lee

Public health is increasingly important from both environmental and public health standpoints for the development of cities. From a planning perspective, one solution is to increase walkability and several methods are being developed to assess the quality of existing urban environments to help promote walkable communities. Although several US cities started to move towards pedestrian-oriented policies, this study concludes that the quality of pedestrian environments cannot be determined solely by using available assessment tools, and recommends additional analytical methods to provide a more complete approach. Although the physical conditions and the quality of the physical environment are important contributing factors to increase walkability, it is equally important to understand and consider the needs, preferences, and perceptions of the users in planning for pedestrian-friendly neighborhoods. This thesis addresses these issues through an assessment of the quality of the pedestrian environment in downtown San Luis Obispo and how it is perceived by its users.

Cost-Benefit Analysis of Greening an Older Modest-Sized Home

Delilah Zoe Leval

This professional project estimates the upfront costs and utility savings expected from greening an approximately 1,100 square foot home built in the 1950s in the San Francisco Bay Area. Two sets of upgrades (alternative and original) were compared for costs and benefits. The alternative set (which included ceiling insulation and omitted upgrading to dual-pane windows) clearly out performed the original set. The alternative set would be expected to reduce resident utility bills by 28% annually, and to prevent approximately 2,700 lbs of carbon dioxide emissions annually. The water efficiency upgrades were the best performing group of upgrades, as they had the lowest upfront cost and shortest payback period. Future very low-budget greening programs, in nearly all cases, should include a full-set of water fixture modifications, weatherstripping, and clotheslines. As budgets allow, other upgrades from alternative upgrades are recommended, such as ceiling fans, programmable thermostats, and ceiling insulation. Whenever possible, workforce development labor should be used to simultaneously reduce labor costs and multiply the social benefit of each project dollar by providing entry-level green collar jobs.

Emerging Trends in Greenhouse Gas Thresholds of Significance for Use Under The California Environmental Quality Act

Nancy E. Mathison

This study determined the state of the practice and emerging trends in developing greenhouse gas (GHG) thresholds of significance for use under the California Environmental Policy Act (CEQA). To describe the

adopted, proposed, or considered approaches for developing thresholds of significance by air districts and the thought processes behind these decisions, information was obtained through surveys and phone interviews from twelve employees of air districts in California State agencies and consultants that are considered experts on this issue. The results of this study include a matrix comparing the approaches of the three air districts that have adopted or proposed GHG thresholds of significance, and identification of the common themes from air districts' responses that do not have adopted or proposed thresholds. While the development of GHG thresholds of significance is an evolving practice, emerging trends in this practice were identified. These trends include providing flexibility in options, an emphasis on programmatic approaches and a preference of including bright-line thresholds and efficiency thresholds. Furthermore, this study concludes that while the three air districts that have proposed or adopted thresholds have laid the groundwork for other districts, some of the approaches, or the thresholds themselves may not be easily transferable based on regional differences. This study provides insight into how GHG emissions might be addressed in CEQA documents throughout the State.

**Sense of Community and Neighborhood Design:
A Comparative Case Study of Four Arroyo Grande Neighborhoods**
Jamie Kathleen Smith Miss

The relationship between the built environment and human behavior is a common topic amongst New Urbanists who claim they can foster greater sense of community through the use of design. The goal of this study is to investigate the relationship between the built environment and sense of community and identify which physical properties positively affect sense of community. Building on findings by Glynn (1981), McMillan and Chavis (1986), Nasar and Julian (1995), Talen (1999) and Lund (2002), this thesis not only examines the physical properties claimed to foster sense of community but the social variables that literature has found to also affect sense of community among residents. Four residential developments in the City of Arroyo Grande, CA were surveyed on their perceived sense of community. The Village and Berry Gardens were selected as developments containing New Urbanist design elements, while Rancho Grande and Oak Park Leisure Gardens were selected as traditional suburban developments. Based on the four sense of community indicators used (membership, integration and fulfillment of needs, influence, and shared emotional connection) the results show a lack of relationship between the spatial variables in each residential development and the sense of community its residents have. The social variables, education, gender, age, and homogeneity, can account for the range of sense of community scores among physically similar developments as well as physically different. This implies that the built environment plays the role of a medium in which all factors influencing sense of community are stimulated rather than determining sense of community. **Improving Public Health through**

Urban Design: the Case of Delano, California
Adriana C. Neal

Emerging research shows a clear relationship between urban design and public health. Major issues affecting public health include cardiovascular disease, high rates of obesity, and associated diseases like Type 2 diabetes. These conditions can be attributed, in a large part, to personal habits, including diet and physical activity. Certain elements of urban design have an impact on personal habits and therefore affect health. This thesis explores the relationship between urban design and public health, first broadly, and then at a micro-scale using in the City of Delano, California, as a case study. An in-depth literature review is followed by a Community Health Assessment, a tool developed to gather data on existing conditions of urban design and public health in Delano. The findings informed a series of policy and urban design recommendations that will contribute to the improvement of the overall public health in Delano. The urban design recommendations were developed as a

document, titled “Healthy Delano Design Guidelines: A Guide to Health-Oriented Planning,” to be used as a reference by the City of Delano.

The Relationship Between Quality of Life and LEED-ND Certified / Certifiable Neighborhoods
Stephanie Nicole Timm

The United States Green Building Council (USGBC) has developed a rating system that examines the sustainability of neighborhoods. They have specifically stated that that LEED-ND certified neighborhoods will protect and enhance residents’ overall health, the natural environment, and quality-of-life. This study uses relevant quality of life indicators that are commonly identified by social scientists as accurate interpreters of the various quality-of-life domains to determine if there is, in fact, a relationship between LEED-ND and quality of life. Four of the ten domains examined were found to be related to LEED-ND certified/certifiable neighborhoods thus, to a certain extent, LEED-ND certification does increase quality of life as compared to traditional suburban neighborhoods.

focus

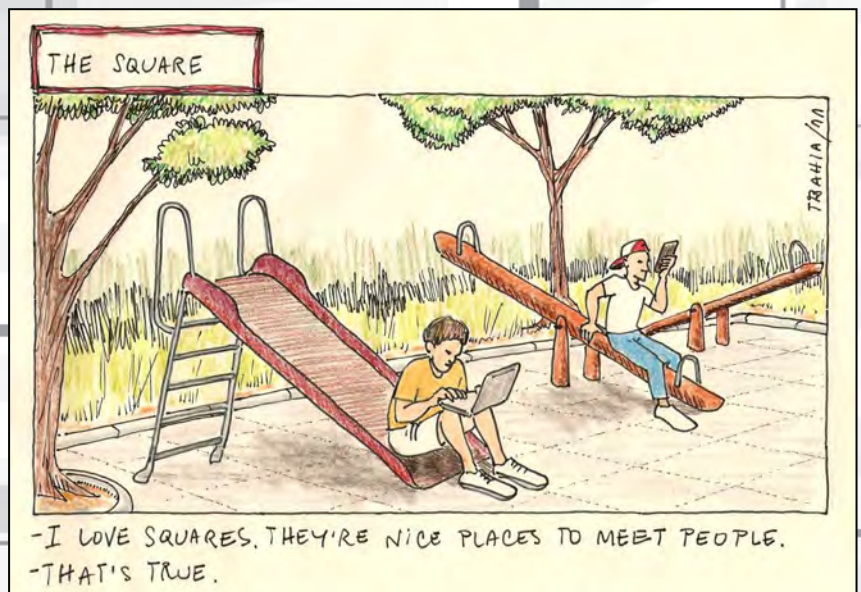
Journal of the City and Regional Planning Department
College of Architecture and Environmental Design, California Polytechnic State University

Cartoon Corner

Blaze Syka
A junior in CRP's undergraduate program, interested in urban design, Blaze enjoys arts through graphic and musical mediums including painting, sketching, and playing and performing with the guitar.



Tarcisio Bahia
Architect urbanist with a PhD in Architecture from the Universidad Politécnica de Cataluña, Barcelona. Associate Professor, School of Architecture and Urbanism, Federal University of Espirito Santo, Vitoria, Brasil. Tarcisio loves drawing cartoons and depicting the irony of modern life.



focus

This journal highlights the work produced in the City and Regional Planning Department, Cal Poly, San Luis Obispo.

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