



Methods



Anxious mornings at the Home Depot for the day labor workforce that doesn't have any work. Quiet and empty evenings on the parts of San Pablo Avenue where businesses don't stay open past 6pm. 2009.

The multi-disciplinary nature of urban design calls for a variety of methods to be employed for a single project of this complexity. In this thesis, there are two clear sections of inquiry: the discussion about multi-jurisdictional urban arterials and sustainable design, and the actual designs that emerge from the ideas developed in the larger discourse.

Discourse Construction

The literature review and code review frame the ideas contained in this thesis within the disciplines of the constructed environment. Historical background information and definitions are included to clarify the exact dimensions of the argument. A series of critical subjects are considered: urban arterials, San Pablo Avenue as exemplar, corridors and strips, multi-jurisdictional geographies, fiscalization of land use and parcellization, urban design, infrastructure, landscape urbanism, form-based and performance-based codes, and the Urban Ecotone code. Key analytical discussions are interspersed throughout the literature review to create links between the different subjects, which are not presented in a linear argument and which are not self-evidently related to one another. Three brief case studies of multi-functional infrastructures are also presented within the literature review to fill a gap where practically no directly-related literature has been written. Ultimately, the design portion of this thesis functions as a testing ground for the ideas put forth in the discourse construction.

Design: Corridor | Strip | Site

Moving from the discourse into the design requires a significant amount of analysis at a variety of scales. The three major scales of analysis in this thesis are the corridor, the five-mile strip and the site. The public and private realms inform the design discussion for all of the scales.

The analysis chapter begins with a history of the San Pablo Avenue corridor as it relates to the issues of economy, equity, and ecology framed through land use and transit development. This particular lens of the history is constructed through a secondary source paper written by

Gregory Newmark and Elizabeth Deakin in 2006 “Evolution of a Multiuse Arterial Corridor: California’s San Pablo Avenue”, and through direct examination of historic maps and aerial photographs.

To document existing land use and environmental conditions at all scales, I am relying heavily on publicly available Geographic Information Systems (GIS) data, which I obtained in part from the Association of Bay Area Governments. ABAG has assembled a significant amount of land use and transportation GIS mapping information for the San Pablo Avenue Corridor, from Oakland to Hercules, for their study “*Towards a Common Agenda on State Highways.*” In order to map the entire corridor, I obtained additional GIS data from the Contra Costa County Transportation Agency so that the area from Hercules to Crockett is included in the corridor-scale analysis. Demographic data comes from either the ABAG study, or the ABAG study’s primary source: FactFinder, the online US Census information website. For the strip-scale analysis, I rely significantly on information taken from the *San Pablo Avenue Specific Plan Existing Conditions Report*.

In order to map detailed land use, specifically conditions where auto-related businesses are located along the corridor, I had two choices: I could purchase the information from InfoUSA at a cost of thousands of dollars with the guarantee of current data, or I could sit a tripod-mounted digital video camera through the sunroof of my car and record all of the storefronts as I drove twenty to twenty-five miles an hour down the entire length of the avenue. I chose the latter, because it was a cost-saving primary source documentation method. Initially, I had thought to use Google Maps Streetview, but the resolution of the images was not clear enough to identify the types of businesses. The video is useful for mapping conditions along the corridor, but also as a descriptive visual aid for the thesis presentation. The video, along with information taken from sources like Google Earth and Microsoft Livemaps Birdseye View will be combined with the GIS information to map different characteristics along the corridor.

These conditions serve as the foundation of the code analysis and design. Certain conditions are mapped along the entire corridor, but the code design is limited to the five-mile strip scale, with the idea that the codifying process is a method unto itself, which has the ability for extrapolation across the entire corridor.

The analysis method is not limited to the site of San Pablo Avenue; an analysis of codes as a design tool is also necessary to arrive at a design for the Urban Ecotone Code.

The popular appeal of form-based codes comes from their ability to codify community consensus on issues of form and function in order to streamline the development process. I would be remiss if I did not consider community input for the design of the code in this thesis, since it is about a specific place. Given the time constraints of this master's thesis, I will not be able to conduct my own consensus building workshops for this design. However, I will use data from community surveys conducted by Elizabeth Deakin's transportation studio in 2004 and from the public participation process that is ongoing as part of the El Cerrito San Pablo Avenue Specific Plan project, which also includes parts of Richmond. A summary of how the survey data was used to make decisions related to constructing the code is presented in the code design chapter.

The code design warranted its own, unique method: the code test. Once the code was designed, a prototype was tested by a group of designers on sites located in the five-mile strip of San Pablo Avenue. Their test results helped to refine the final code, along with my own code test design. The code test method and results are discussed in the code test chapter.

The following list of definitions may assist the reader with unfamiliar terms mentioned in this thesis.

Definitions

Auto Space

Anywhere you can drive an automobile: streets, driveways, parking lots, and in some cases, sidewalks.

Urban Arterials

A street that facilitates through movement of traffic by regulation or control of pedestrian. It is an improved arterial street or highway, usually without control of access, on movements, of vehicular stopping and parking, and of cross and turning traffic to minimize interference to through traffic movement (Barnett 1948, 5 as quoted in Wilson 1998, 34).

6 Paradigms of Nature

1st Nature--Wilderness

2nd Nature--Agriculture

3rd Nature--Parks

4th Nature--Industrial Landscape—nature and mechanization (engaging the land at a greater-than-human scale)

5th Nature--Post Industrial Reclamation

6th Nature--Ecological Urbanism

The paradigm of 1st (Wilderness), 2nd (Agriculture) and 3rd (Parks) Nature are discussed by numerous landscape scholars. Two sources: Claudia Lazzarro (Lazzarro, Claudia, *The Italian Renaissance Garden*. New Haven: Yale University Press, 1990) and John Dixon Hunt (see Hunt, John Dixon, *Greater Perfections*. Philadelphia: University of Pennsylvania Press, 2000, chapter 3). 4th industry, (engaging the land at a greater-than-human scale), 5th post industry (reclamation), and 6th ecological urbanism -- are constructs from Jane Amidon's work taken from her lecture entitled *Big Nature* given at UC Berkeley on November 24th, 2008.

Multi-jurisdictional Space (associated with the urban arterial)

An area that is perceived as a single-space whose design and function is controlled by multiple agencies. Counties, municipalities, transit agencies, and utility companies are responsible for the infrastructure systems in the public realm of the urban arterial and the pertinent governing body controls the private realm through zoning ordinances. The level of complexity increases with the number of agencies controlling elements within this space, and the perceived seamlessness of this space is directly related to the level of coordination and cooperation between the different agencies.

Neoliberalism

“It has been part of the genius of neoliberal theory to provide a benevolent mask full of wonderful-sounding words like freedom, liberty, choice, and rights, to hide the grim realities of the restoration or reconstitution of naked class power, locally as well as transnationally, but most particularly in the main financial centres of global capitalism,” (Harvey 2005, 119).

Neoliberal Urbanism

Neoliberal urbanism represents the privatization of public goods, through direct privatization or indirectly through public/private partnerships, signifying a political shift towards de-regulation and an accompanying economic shift towards market-based decision-making.

Form-Based Codes

Form Based Codes (FBC) are “a method of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use, through city or county regulations. The regulations and standards in form-based codes, presented in both diagrams and words, are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development rather than only distinctions in land-use types. This is in contrast to conventional zoning’s focus on the micromanagement and segregation of land uses, and the control of development intensity through abstract and uncoordinated parameters (e.g., FAR, dwellings per acre, setbacks, parking ratios, traffic LOS) to the neglect of an integrated built form. Not to be confused with design guidelines or general statements of policy, form-based codes are regulatory, not advisory,” (Form-Based Code Institute Website <http://formbasedcodes.org/definition.html> accessed 20 October 2008).

Smart Growth

“Among other things, smart growth policies call for compact, diverse, and walkable neighborhoods; alternatives to the car; protection of open land and natural resources; and an integration, rather than separation, of housing types and prices,” (Fulton, 2005, 293)

Proposition 13

Passed by 65% of voters in 1978, Proposition 13 is a constitutional amendment that reduced property tax rates by 57% and resulted in a dramatic reduction in the amount of local property tax revenue available for cities, counties, and especially for schools. Prop 13 rolled back property assessments to their 1976 values and limited property taxes to 1% of their assessed value. It also limited property valuation to 2% per year unless the property was sold (PBS Merrow Report <http://www.pbs.org/merrow/tv/ftw/prop13.html>).