

From counterpublics to counterspaces: Bicyclists' efforts to reshape cities

Lusi Morhayim

University of California, Berkeley

Abstract

This research examines bicyclists' demand for the right to the city through an analysis of Critical Mass (CM) rides in San Francisco, California. The lack of investment allocated to alternative forms of transportation in the United States produces a form of social and spatial injustice because it eliminates freedom of choice not only for already disadvantaged populations but also for those who engage in everyday politics through their lifestyle choices. Ethnographic, historical, and iconographic analyses of CM rides demonstrate how these bicyclists perceive each other as a public built around shared values and lifestyles (that may broadly be defined as environmentally friendly and socially responsible). Bicyclists' shared lifestyle defines their counter position on urban form. CM bicyclists appropriate urban streets and carry their counterdiscourses regarding street use into the public sphere. The rides strengthen bicyclists as a counterpublic, challenge automobiles' cultural hegemony in modern urban life, subvert everyday urban experience, and allow bicyclists to create their counterspaces as they collectively ride.

Keywords: Critical Mass, bicycling, counterpublic, counterspace, lifestyle politics.

In San Francisco, on the last Friday of every month since 1992, rain or shine, bicyclists gather in Justin Herman Plaza starting at around six in the evening. When their numbers grow large enough for them to negotiate the right of way safely, they start the ride together. One by one, all of the bicyclists pour onto Market Street. At the very time when motorists are anxious to return home, hundreds of bicyclists circle the plaza, blocking traffic on Embarcadero in both directions. They ride in between the cars, play music via speakers they carry on their bikes, and cheer. After completing several trips around the plaza, the Critical Mass (CM) ride, sometimes stretching more than a mile, moves on to other parts of the city.

Edwards (2003) argues that automobility is one of the technological systems that co-construct modern society across the globe. Like other similar technologies, such as railroads, electric lighting, and the Internet, it has become such an essential part of our lives that we do not notice it; yet, we depend on automobility extensively (Edwards, 2003.) Urry (2004) argues that the system of automobility is more culturally dominating in character than the media or use of personal computers: A combination of factors makes automobility global and irrevocable, such as the powerful oil and automotive industries, urban planning, related industries that support and depend on automobiles, people's emotional ties to their vehicles, and cultural and behavioral dependency. Thus, despite obvious global problems such as the oil crisis, air pollution, and climate change, we continue to live automobile-dependent lives (Ladd, 2008).

The enduring influences of automobility are perhaps most obvious in the reorganization of physical landscapes. Le Corbusier's *Radiant City* planted the first seeds of modern urban planning, emphasizing functionality. Designing streets to accommodate the rapid flow of automobiles became one of the primary goals of planners. Following World War II, American cities have undergone a major transformation. Federal highway acts of 1947 and 1956 cut through cities and destroyed the social and physical fabric of close-knit neighborhoods. Suburban developments emptied inner cities. Automobiles had long-lasting effects on the social life of the streets, because automobile ownership gradually increased, and travelling in private automobiles became preferable to travelling on foot. Jane Jacobs contended that modern urban planning indicates that the purpose

of life has become to produce and consume automobiles (Ladd, 2008). CM throws the bicycle in the way of such car-dominated mentalities that have shaped urban landscapes for decades.

Transportation is an arena of public life that is seldom exposed to public debate. Living among a network of motorways and having to drive everywhere is taken as an absolute way of living in most cities in the United States. Yet, automobile-dependent lifestyles and cities neglect the needs of many publics. California in general and the San Francisco Bay Area in particular have seen a fair share of antiwar protests, environmental conservation, civil rights and historic preservation movements. One of these movements was specifically about the influence of transportation planning on urban form, as a reaction to the construction of freeways across the country in the 1950s. As part of nationwide freeway revolts that started in the 1950s, residents of San Francisco have formed alliances and persuaded the city's board of supervisors to vote against seven out of 10 freeway proposals (Faigin, 2006). Critical Mass was born into such a social backdrop, one that questions automobiles' place in urban space.

Bicyclists on CM rides, by demonstrating and demanding alternative possibilities, carry matters of urban and transportation justice into the public sphere. The notion of the public sphere refers to an idealized democratic model in which a civic society made up of private individuals comes together and projects the needs of the public to the state. Habermas's (1962) articulation of the 18th century public sphere was that it was made up of a society of bourgeois men who gathered in public spaces of the city such as coffee houses. Women and blacks, as marginalized members of society, were excluded from the public sphere; thus, their interests were not represented to the state. Fraser argues (1992) that open communication among plural publics is essential in creating an ideal public sphere and democratic politics. Fraser (1992) identifies marginalized groups as *counterpublics* and states that *subaltern counterpublics*, such as women, people of color, and gays and lesbians circulate alternative discourses in order to strengthen their collective identities. CM bicyclists' apparent counter position on the mainstream transportation model and automobile-dependent urban form make them a counterpublic in the public sphere of transportation.

While text-based (visual or audio) discourses are common, CM bicyclists distribute their counterdiscourse in public spaces mainly by showcasing an alternative use of the streets. Lifestyle politics, a term coined by Bennett (1998), refers to individuals who participate in everyday politics through their consumption choices, just as bicyclists do. Environmentalism, critiques of capitalism and modernity contribute to defining bicyclists' lifestyle choices. In a 2001 survey of Critical Mass bicyclists in San Francisco, a total of two-thirds of the 149 respondents selected broader issues such as transportation policy (25%), the use of public spaces (17%), global environmental issues (13%), and a critique of capitalism (9%) as the issue they currently most closely associate with Critical Mass (Blickstein and Hanson, 2001). Despite the fact that most cities today discourage people from being independent of automobiles, the presence of several grassroots rides that are alternative to CM indicates people's desire to obtain further access to urban streets.

The idea of "right to the city," as first introduced by Lefebvre (1996), indicates a demand to collectively remake urban spaces in order to make them more inclusive and just. More often than not, social and spatial justice and the right to the city ideas refer to injustices on the basis of race, gender, and class. Bicyclists, too, make urban right claims, though their claims are not supported by the familiar categories used in defining justice, since they are not always part of a commonly recognized disadvantaged population. However, demanding right to an urban infrastructure that incorporates clean, natural environments and accommodates healthy and physically-active lifestyles, is also a significant rights claim and spatial justice problem. The CM bicyclists' case demonstrates how spatial inequalities and marginalization of publics can be true for publics identified on the basis

of their lifestyle practices and how this exist in a complex relationship to commonly recognized categories of spatial injustice.

In this paper, I argue that the lack of investment allocated to alternative forms of transportation in the United States produces a form of social and spatial injustice because it eliminates freedom of choice not only for already disadvantaged populations but also for those who engage in everyday politics through their lifestyle choices. When there is already an existing infrastructure of streets, a public amenity, restricting its availability to a single use and a single public such as motorists is not different from the ways in which African Americans, women, and the homeless have been isolated from urban streets in various times.

CM bicyclists perceive each other as a public built around shared worldviews, values, lifestyles, and identity traits (broadly defined as environmentally friendly and socially responsible), which in turn defines their counter position on the shape of urban streets. The analysis of the CM movement gives insight into the spatially unique ways in which a counterpublic of bicyclists negotiates its urban needs in the public sphere with motorists and the local government and creates their counterspaces.

Methods

I chose the San Francisco Bay Area as a research site because CM began and developed in San Francisco before it became a global movement. In addition, despite its progressiveness in many areas, San Francisco was not the most bicycle-friendly city for many years, compared to cities like Portland, Oregon. Only in recent years has the city made a leap towards becoming more bicycle-friendly. Thus, bicyclists' struggle has been an ongoing one.

I undertook an ethnographic approach, and as a participant observer, I bicycled in Critical Mass rides in San Francisco and Berkeley, CA, between May and September of 2010. I listened to the participants' motivations for participating in the event, recorded interviews with 35 bicyclists, and had innumerable casual conversations. I approached people at the beginning of the rides and interviewed some bicyclists on the spot. I also interviewed some of them on the phone by recruiting them with flyers during CM rides and on Bike-to-Work Day.^{1,2} I conducted an online survey about the demographics of CM bicyclists and their transportation choices which was responded by 69 people.³ Because bicycling culture is oftentimes represented visually, I examined the symbolic dimension of bicyclists' counterdiscourses by analyzing iconic illustrations, flyers, and signs that bicyclists carry on their bikes. I also examined the historical accounts of early CM rides by going through the archives and letters to the editor of *The San Francisco Chronicle*, the newspaper with the largest circulation in the Bay Area.

¹ Pseudonyms are used in the paper to identify the interviewees. Those whom I recruited on Bike-to-Work Day were only included as interviewees if they also participated in CM.

² "Bike-to-Work Day" is a once-a-year event organized by the San Francisco Bicycle Coalition in order to promote commuting by bicycle.

³ The information about the online survey at www.surveymonkey.com was distributed during the January 2012 CM ride through flyers, through the SF Critical Mass Facebook page, at www.sfcriticalmass.org, and through my personal Facebook network. According to the survey results, 22.1% of the participants were riding for the first time, and 30.9% said that they participate 6-12 times per year. As to longevity, 59.7% of them have been participating for 5 years or less, 20.9% between 5 and 10 years, 11.9% for 10-20 years, and 7.5% for the last 20 years.

Bicycling and spatial justice

Critical geographers argue that space matters and reflects social inequalities. Soja's (2010) account of the Bus Riders Union's successful lawsuit against the Los Angeles Metropolitan Transportation Authority in the 1990s is one such example in which a lack of alternative transportation was recognized as discrimination even in the legal arena. The bicyclists' struggle too is inherently over land use, reshaping the city, and making cities just.

Andy Singer graphically illustrated one aspect of bicyclists' justice arguments by drawing parallels between non-drivers and nonsmokers (Fig. 1). His illustration calls for car-free streets in the same way that smoking has been banned in public spaces because it is unhealthy and thus unfair to those who do not smoke. A demand for bicycling infrastructure also underlies a demand for clean air and physically active and healthy lifestyles.

In the U.S., many people live in cities and suburbs built for the efficient transportation of motor vehicles, where bicyclists' and pedestrians' needs are only secondary. More than 30 million Americans cannot drive because of economic restrictions, age, or disability, and some choose not to drive (Gotschi and Mills, 2008). According to the 2008 San Francisco Municipal Transportation Agency report, approximately one-third of all respondents bicycle because of its low cost compared to driving or mass transit.

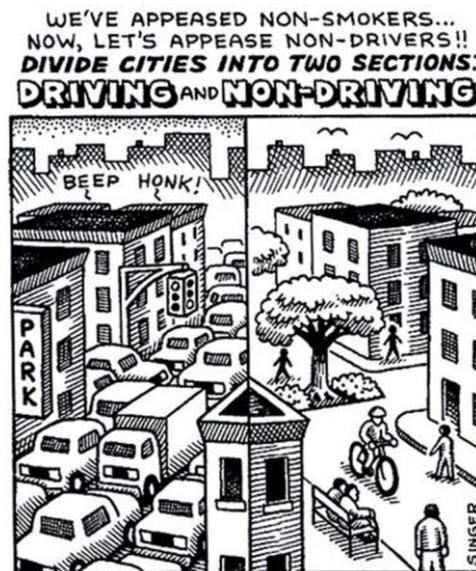


Figure 1. Driving/Non-driving, divide Cities: Illustration comparing bike-friendly and automobile-dominated urban space by Andy Singer (<http://www.stickergiant.com>, accessed on March 1, 2011).

Beside its low-cost qualities, bicycling is also important for its health benefits. Some ethnicities, as well as older and younger populations, are more vulnerable than others to the effects of a sedentary lifestyle, such as obesity, an increasing health problem in U.S.⁴ Living in automobile-dependent physical settings decreases the likelihood of physical activity and increases the risks of several illnesses, including cardiovascular health problems. Bicycling and walking are among the most cost-

⁴ According to data analyzed over a three-year period, when compared with non-Hispanic whites, non-Hispanic blacks had a 51% and Hispanics had a 21% greater prevalence of obesity (Pan et. al, 2009). Furthermore, approximately 12.5 million American children and adolescents are obese (Centers for Disease Control and Prevention, 2011).

effective solutions for disease prevention. A number of studies show that even a slight increase in daily bicycling and walking can decrease a number of diseases (Oja, Vuori and Paronen, 1998; Centers for Disease Control and Prevention, 1996). Short trips of three miles or less, which account for about 72% of all automobile trips taken in the U.S., could be replaced with walking and bicycling (US Department of Transportation, 2010), thus contributing to the overall health of vulnerable populations.

Traffic danger is a significant deterrent, especially for women, children, and the elderly and they “strongly prefer separate facilities that give them more protection from motor vehicle traffic” (Pucher and Buehler, 2010). When bicycling does not feel safe, such groups may not even consider taking up bicycling. San Francisco is a case in point. Forty-nine percent of San Francisco’s population is male, and fifty percent is female (Bay Area Census, 2010); however, the majority of frequent bicyclists in San Francisco are men (72%), Caucasian (70%), and between the ages of 26 and 35; and, only 23 percent of frequent cyclists are women (San Francisco Municipal Transportation Agency -SFMTA, 2008). Asians make up 32% of the city’s population, but only 12% of frequent cyclists. The same applies to African Americans (7% vs. 2%) and to Hispanics (14% vs. 10%) (Table 1). Among several deterrents to bicycling, between 71 and 79% of respondents state that they are not comfortable sharing the road with cars, and between 75 and 80% state that there are not enough bike lanes (SFMTA, 2008). According to Pucher and Buehler’s (2008) report, in countries with extensive cycling facilities (such as the Netherlands), cycling is fairly evenly distributed among age and gender groups.

Despite robust evidence demonstrating the social, monetary, environmental, and public health benefits of bicycling, and in spite of the fact that bicycle and pedestrian transportation comprises 12% of all trips, only 2% of federal transportation funds were spent on pedestrians and bicyclists in 2009 (United States Department of Transportation, 2010). This disproportionate allocation of federal transportation money suggests the low priority given to populations that need or choose alternative transportation and the spatial inequality created in terms of access to streets.

	% of overall San Francisco population	% of frequent bicyclists in San Francisco
Men	49	72
Women	50	23
Caucasian	53	70
Asian	32	12
African American	7	2
Hispanics	14	10

Table 1. Percentage of San Francisco’s population compared with the percentage of bicyclists in San Francisco (derived from San Francisco Municipal Transportation, 2008 and Bay Area Census 2010).

Bicyclists comprise a marginalized public in respect to access to streets. However, they are not always part of a marginalized population based on ethnicity, gender, or income that would come up in most right to the city discussions, making it complicated to make a case of spatial justice for these publics. The average bicycle commuter in the US is a 39 year old male whose annual income is over \$45,000 (Moritz, 1997). Considering Pucher and Buehler’s (2010) argument on women and the

elderly needing safer conditions to ride, it is not surprising that men and younger populations make up the majority of bicyclists.

According to the online survey distributed at the San Francisco Critical Mass ride in 2012, 85.3% of the CM bicyclists are Caucasian, 79.7% of them are male, and 33.8% are between 26 and 35 years of age. These demographics are close to the demographics of frequent bicyclists in San Francisco outlined above. None of those groups is considered a minority or marginalized in respect to common justice discussions. According to the same survey, 55% of the participants are working full-time, and only 10% are unemployed. Only 20.6% of the participants reported that they earn (annual household income) less than \$30,000; 25.4% earn between \$30,000 and \$50,000, 12.7% earn between \$50,000 and \$70,000, and the remaining 40.3% earn more than \$70,000. In terms of education level, 49.3% have a bachelor's degree, and 21.79% have graduate degrees. San Francisco County's 2006-2010 median household income level is \$71,304, and 51.2% of the population have a bachelor's degree or higher according to the U.S. Census Bureau. According to the 2012 CM survey, 53.7% of the CM participants own an automobile, though 45.6% of them reported that bicycling is the transportation mode they use most often when they commute. That was followed by a combination of bicycling and other modes at 23.5%. Given the data above, nearly, and in some cases over, half of CM bicyclists are from the middle to high income brackets of society, and they are well educated. Of the respondents, 49.3% strongly agreed, and 29% agreed, with the following statement: "I want to make a statement regarding the lack of bicycling infrastructure." Additionally, 47.8% of the respondents strongly agreed, and 30% of them agreed, that they "want to show the automobile drivers that bicyclists are traffic too." These survey results demonstrate that for most of these bicyclists, bicycling is a lifestyle choice rather than an economic necessity.

Spatial justice often brings to mind spatial injustices based on gender, race, ethnicity, and income. However, the lack of infrastructure for alternative mobility (whether it is public transportation, bicycling, or walking) essentially creates limitations on freedom to choose and access to public space; thus, it marginalizes people based on their lifestyle choices. Such spatial injustice affects not only commonly recognized disadvantaged populations, but also populations with varying demographic characteristics. Participating in CM rides is an explicit statement of bicyclists' right to the city demands and resistance to such marginalization as the analysis of the rides demonstrates.

Rise of the bicyclist counterpublic

The name for the ride, "Critical Mass," was adopted after an observation of everyday tactics of bicyclists on urban streets in China, which was documented in Ted White's movie, *Return of the Scorcher*. The movie documents bicyclists in China that "come up to an intersection and wait till they have enough numbers to push through the cars and make them stop" (White, 2002), the same tactics that make CM rides possible.

Today, well over 500 people may participate in the San Francisco CM rides in good weather, making it hard to identify one common goal or motivation that represents all of the participants. However, it is evident from CM's transformation from a 15-20-person ride called the "commute clot" in 1992 to a ride of 5,000 people in 1997 that CM represents bicyclists' demand for bicyclists' right to the streets.

I met Veronica, a woman in her early 20s, when I was waiting for the CM ride to begin. I was drawn to her because of her recognizable outfit: a shiny silver cable around her helmet and metallic blue tights. She told me that her outfit implies that she does not care what motorists think about her. In an interview, Veronica sums up the standpoint of many CM riders to whom the protest aspect of the rides appeals:

No one asked us if it should be organized that way. People who were coming from a petroleum-centric mentality organized the city ... to move people as if they were goods to create money. There are so many lines of buses going into the financial district ... but there is only one MUNI⁵ to get to Golden Gate Park. It's really [about] where the city is placing its resources and what it's emphasizing. So, we are saying that we don't need to participate in that necessarily. Although it's the built environment and the built reality, we can forge our own path through that, and we don't need to listen to your signals and to your stop signs and to your one-way traffic.

Bicyclists started to form a counterpublic based on such a critical outlook of the form of the city. CM steadily evolved into something between a parade and a public protest, providing the opportunity for both those who want to enjoy riding in the city safely by bicycling with others and for conflict-driven bicyclists eager to block the very motorists who block them. As more people joined in the rides, tensions between CM bicyclists and motorists, Mayor Willie Brown, and city police rose. The attitudes of the police towards CM riders, combined with the mayor's lack of interest in improving public transportation, catalyzed the biggest ride ever in July 1997 (Epstein, 1997).⁶ Deborah Underwood's letter to the editor of the San Francisco Chronicle indicates bicyclists' frustration during those times (Underwood, 1997):

So now Mayor Brown wants to crack down on Critical Mass. Although I haven't participated in one yet, I'm sure tempted, because I'd love to see what it's like to actually feel safe riding on the city streets. I feel like I'm taking my life in my hands every time I ride to work ... I find the lack of official support for cycling appalling ... When I bought my bike, I phoned the city-sponsored bicycle hotline for commute route assistance, and no one ever returned my call ... I can't imagine why the city doesn't do everything it can to encourage more people to bike to work ... Tell the mayor that if he provides me with a safe way to bike to work every day, I'll stay away from Critical Mass.

After the June ride in 1997, the mayor took a radical stance against CM and commented about terminating the rides (King, 1997). The San Francisco Police Department (SFPD) announced that it would no longer facilitate the ride or block intersections. The department also threatened to issue tickets and make arrests if needed. On July 20, 1997, the San Francisco Bicycle Coalition (SFBC) board members became frustrated with the mayor, who wanted to discuss how to control CM but ignored the bicyclists' need for safety and public transit. The board members pulled out of a meeting with the mayor and sent letters to the SFBC's 1,200 members, urging them to support the coming July 1997 CM ride (Matier and Ross, 1997).

Even though CM continuously claimed not to have an official representative, after talking with some bicyclists, the City and the SFPD announced to the media that they had a deal with CM representatives for a pre-designated route for the July 1997 ride and added that no tolerance would be shown to those who did not stick to the route. However, the basic premise that CM is built upon is that it is organized in a democratic manner, without any authority or representative. "Xerocracy," a combination of *democracy* and *Xerox*, refers to the democratic way of deciding the route at the beginning of each CM ride.⁷ Whoever prepares more Xeroxes of the route and convinces the most people gets to influence the route (Carlsson, 1992). Therefore, this announcement demonstrated the City's misrecognition of CM and reinforced their suppression.

⁵ MUNI is the municipal public transit system for the city and county of San Francisco, California.

⁶ Letters to the editor of the San Francisco Chronicle from June-July 1997 did not only speak on behalf of bicyclists but also critiqued the money spent on highways instead of public transit (Melville, 1997; Wilcott, 1997).

⁷ Xerocracy is not actively practiced in San Francisco anymore. During my field research, usually whoever was at the front would lead the ride. However, in some cities, such as Chicago, bicyclists do follow routes that are printed on maps (see Chicago Critical Mass Route Archive, <http://bedno.com/ccm>).

As a response to Mayor Brown's attempt to control CM, several thousands of bicyclists went out on the streets on the July 25, 1997 ride. The mayor's attempt to stop the rides proved futile. Far from following a predetermined route, the 5,000 bicyclists started to flow in several directions, blocking traffic all around the city. Bicyclists figuratively demonstrated the sheer number of frustrated citizens and the size of the demand for the improvement of alternative transportation. Arrests were made, and charges brought against CM riders included assault, battery, resisting arrest, vandalism, unlawful assembly, impeding traffic, and failure to disperse (Epstein and Martin, 1997). However, in the following days, the San Francisco Chronicle reported that out of 110 arrests, "just eight people arrested at Critical Mass could face jail sentences" (Lee and Epstein 1997; Epstein and Martin, 1997).

The controversy and simply the critical mass created at the event attracted the attention of national and international media. Working in various scales of communication, such as face-to-face, local, and global, CM both galvanized local political action and set an example for bicyclists around the world (Blickstein and Hanson, 2001). With the help of the Internet, CM has spread rapidly to other cities. CM rides have been taking place in 465 cities around the world today as a web search demonstrates. CM has demonstrated that the need to reshape cities is a worldwide concern.

The conditions that created this counterpublic in San Francisco were unique. Both local governance of the time and the environmental activism history of San Francisco contributed to its creation. The movement's strength also came from the inherently fun nature of this gathering; riding in urban streets is not simply a method of commuting, it is also enjoyable. Streets as public gathering spaces served bicyclists well in communicating their demands to the local government and motorists. Not finding much worth in or effect from participating in other outlets of public expression, such as attending City Hall meetings, bicyclists found that using streets for direct political action is more effective in getting their message across. Bicyclists have also demonstrated that once safety is no longer an issue, there are many people who will want to ride on the streets. As Mitchell (2003) argues public spaces may be spaces of democratic politics only if they are accessible. Not having safe access to the streets, therefore, hadn't allowed bicyclists from voicing their opinion in the public sphere until CM brought them together.

What is particularly curious is how this counterpublic is still active today after 20 years of existence. Interviews with the bicyclists articulate the common symbolic meanings driving individual bicyclists to collectively demand better access to the streets still today.

Bicyclists' counterdiscourses

A wide variety of people join the CM rides. Some enjoy the rides' insurgent aspects, some like the safety provided by bicycling with many people, and some participate in order to restate CM's infamous statement, "we are not blocking traffic, we are the traffic." CM is a significant movement, as the history of the ride demonstrates, and it has become known worldwide for being a venue for those who want to make a statement regarding bicyclists' right to the city. James R. Swanson illustrates bicyclists' frustrations with globally dominating automobile culture by representing a single bicycle as powerful enough to encircle and squeeze the automobile lobbies and oil companies headquartered in their downtown high-rise offices (Fig. 2).

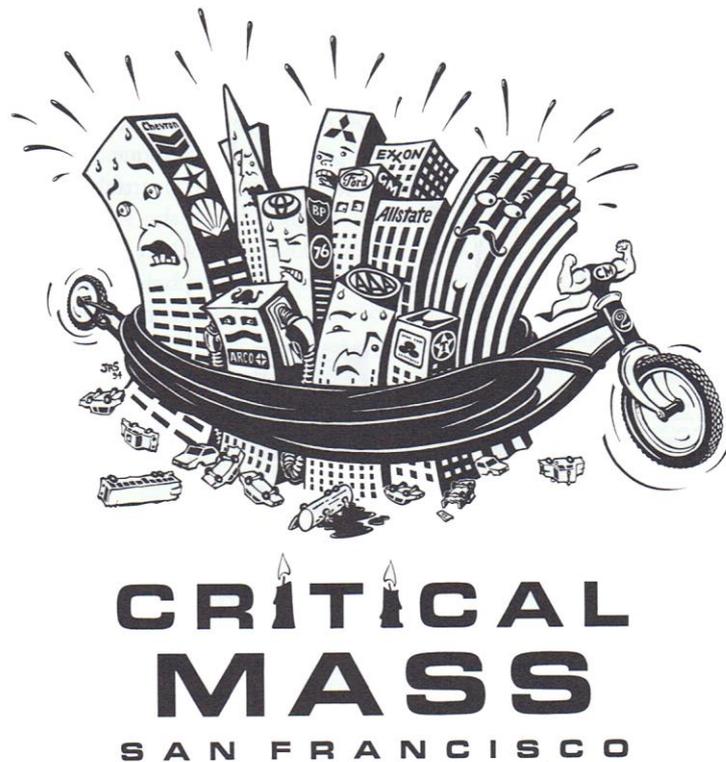


Figure 2. Illustration of bicyclists' power over oil and automobile corporations by James R. Swanson.

Bicyclists are primarily defined on the basis of their transportation mode. Riding a bicycle, whether for leisure, commuting, or running errands, is a choice, to say the least. But, for many bicyclists, it is an extension of their identity, beliefs, and core values. Their shared identity is significant in that it unites them as a counterpublic in their demand for the right to the city. Interviews with and surveys of CM bicyclists further explain these shared values.

Regarding her first time participating in CM, Veronica said "a friend of mine held me [by] my hand and said: welcome to church," thereby comparing the large body of bicyclists to a religious congregation united through shared beliefs. Instead of being based on ethnic identities or religion, the bicyclist community forms itself around environmental and social values. Many of the interviewees assume that most people who bicycle do so because they care about environmental sustainability, just as they themselves do. For instance, when asked why she participates in CM, Caroline (30s) stated,

I like to be surrounded by like-minded people ... I really like being part of a bike community. It has been one of the best communities that I have been part of in my life. I feel like a lot of them are working on advocacy that is important. I would love to not ever have to buy a car. If there are other people out there who are working to make cities more bikeable, then I like to be around them, and I like to feel like I am working with them.

[What do you mean by "like-minded"?)

Caring about the environment, caring about cities being more bike- and pedestrian-friendly ... It seems like urban commute cycling tends to go along with a lot of environmental ideas. People are concerned about pollution and not wasting resources, not using gas if they don't have to make those trips. Biking is a total

good for me ... When I hear about things like the recent oil spill⁸ it strengthens my resolve to not want to contribute to anything it has to do with that ... I just want to remain in the bike community and bike around town with people.

For Caroline, bicycling and being around like-minded people affirms her identity. Even if she is currently not contributing in another way, by participating in the rides she feels she shows her support to the community. Randall (50s), who participates both in San Francisco Bike-to-Work Day and CM, adds the following:

Bikers are really part of a community. It is just like politics, you are part of a party. To me, it is the way that we act in like-minded community, and it is important to me. I think a lot of people are into the environment. They really are proud of the fact that the bicycle has a zero carbon imprint, and they get exercise on their bike ... They tend to be some way very political too, supporting various measures good for bikes ... political part of it ... is keeping the breadth of the progress, keeping the breadth of obstructions that we still deal with ... [These events] somehow, I think, unconsciously and consciously, bring people together in the same structure.

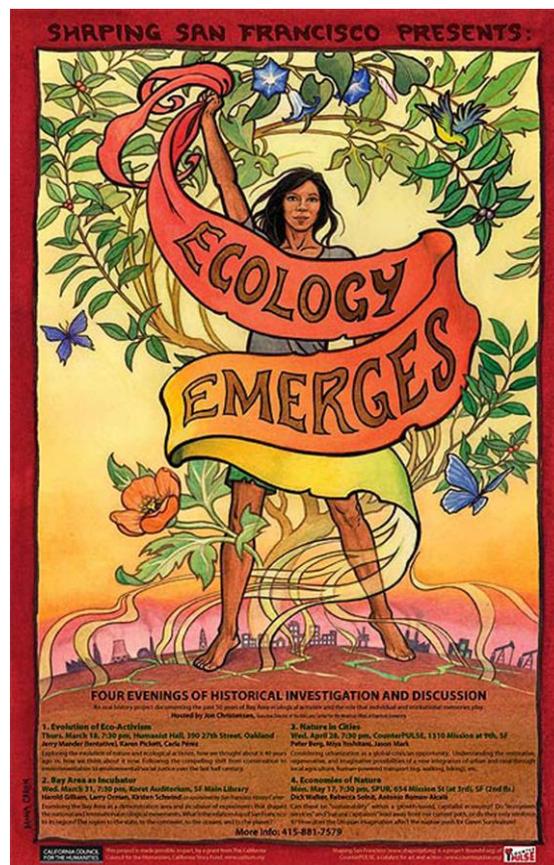


Figure 3. Ecology Emerges: A flyer distributed at the rides that announces a series of talks (Illustration by Mona Caron).

Years after the 1997 ride, participants of CM continue to acknowledge the political benefits of meeting each month during the rides. One of the obstructions that Randall referred to was the San

⁸ British Petroleum's oil spill in the Gulf of Mexico in 2010.

Francisco bike injunction that delayed the city's implementation of a bike plan from 2006 to 2010.⁹ The bicycle communities' political influence extends beyond immediate bicycling matters. Organizers fighting for or against environmentally important state ballot initiatives often target CM for collecting signatures. CM gatherings are places numerous other events are announced too, such as a talk series on the San Francisco Bay Area's history of ecological activism. The talk series' flyer appealed to many bicyclists through its portrayal of a utopian city in which concrete blocks in the background are a matter of past times, and prioritization of ecology in the foreground is a thing of the present and future (Fig. 3). The choice of a dark-skinned woman instead of a white male is also noteworthy as a reference to the opinions of the marginalized.

Several interviewees stated that they strive for a lifestyle that allows them to have the smallest possible ecological footprint. Bicycling is one of the ways of doing this, and CM is a venue for them to show their need for safer access to the streets. Bubblegirl, a San Francisco CM bicyclist who regularly participates in CM and similar bicycling and pedestrian events, is memorable for a small bubble-blowing device attached to the back of her bike. Through this device she says she metaphorically demonstrates the difference between an automobile's and a bicycle's impact on the environment. She says,

[T]o me the bubbles are a metaphor for cars' exhaust. Here I have bubbles coming out of ... my bike. You can see where they go, and if you are biking behind a stinky truck ... you can see ... where these bubbles go is exactly where cars' exhaust goes. It absolutely covers the entire area behind me. My windows, ... I have to wash them several times a year because they get covered with the cars' exhaust ... Exhaust goes everywhere and no one is safe from its ... toxicity ... I know that I am breathing that ... I've often suffered moments of asphyxiation ... because of the nauseating exhaust of buses and drivers who are immoral in their disregard for my right to clean air.



Figure 4. Signs critiquing automobile induced oil dependency and its contribution to global warming and oil wars (photography credit: author).

Other bicyclists demonstrate their views on environmental and political issues surrounding automobile dependency with signs they carry on their bicycles (Fig. 4). In the 2012 survey, a total of 76.8% of the respondents agreed and strongly agreed with the statement that they participate because they do not want to contribute to oil consumption. 81.2%, in total, agreed and strongly agreed that they participate because they do not want to contribute to environmental pollution.

Dorothy (40s) refers to the practical benefits of joining the rides:

⁹ The bike injunction started because of a court trial that claimed that the city's bike plan was not in compliance with the California Environmental Quality Act. The injunction was fully removed in 2010 after the city released a 1,353-page environmental impact report.

Actually, Critical Mass kind of changed my life... [P]robably most people think of CM as a demonstration ... they disturb traffic, it causes problems ... For me, from the very beginning, it was a support group. I didn't know to get around the city on my bike. I didn't know if I could. I didn't feel safe riding in traffic ... What CM provided me was a group of peers who were better bikers than I was, and I learned a lot. ... First of all there is safety in numbers, and comradeship ... it is being in a group that has similar interests ... I realized that I could get all the way out to Ocean Beach on my three-speed and back home, and I can take care of myself.

Bicycling in the city requires adaptation, such as finding paths with lighter traffic and smaller slopes, and negotiating the right-of-way with automobiles requires time to learn. Learning from peers eases these adaptations. CM fosters a community of bicyclists and a support network in which bicyclists can meet with others who have similar lifestyles and values. McDonald-Walker (2000) observes a similar sense of community among motorcycle riders, as they too are united based on shared lifestyles—even though their lifestyle, identity, and values greatly differ from bicyclists'. McDonald-Walker (2000) describes the sense of community of such lifestyle-based groups as both physical (they meet in the same locations) and symbolic (based on affinity and comradeship).

Dorothy also equates people being in their automobiles with being closed in apartments; both spaces are different forms of isolation that lead to limited social interaction. In contrast, no physical barrier exists between people on a bicycle. Dorothy notes,

Living in an apartment in a city of a million plus people versus a small, close-knit community is isolating and often lonely. In San Francisco you have to go out and find your community. Because everybody is living in their own apartments, [that are] like little boxes ... we are kind of closed off from each other. Biking community is huge ... our community doesn't have an exact address. It's on the road with other like-minded people ... you can't talk in a bar ... When you are on a bike you can have a conversation, you can get to know people. You are outside, enjoying yourself, getting exercise ... It's more social ... You don't have walls around you, like in car or apartment ...

The modern city has indeed been known for creating such a sense of anonymity and isolation. CM combats such social isolation by providing a community of like-minded individuals. CM creates a unique venue in which one can easily socialize with others due to the absence of physical barriers around each person. Some CM bicyclists stated that they want to make friends, not only to socialize with, but also with whom they can ride to the places where they socialize. Moreover, CM rides are safe spaces, especially for women. Dorothy adds,

I lived here for 10 years before I really got active in biking. I felt isolated a lot of times, and I didn't know how to meet people ... It's really difficult to meet people at bars. Because the music is loud, and you think that they just want one thing and you just want to have a deeper conversation with somebody and not to have to worry about, umm, being hit on. So, bicycling is a good way to be social but still to keep some boundaries ... I mean especially more for women As far as security ... I think most of the guys out there have a really difficult time keeping up with me. [*Laughing*] [If] somebody is coming on to me, and I am not interested, I can just bike away, and [*laughing*] it's very empowering. I know I can handle myself on a bike. I know I can take care of myself in the city...and, I know if somebody is bothering me, I cruise quickly to get away from them. It's given me confidence in all areas of my life.

Her experience of empowerment as a female bicyclist is not unusual. By the end of the 19th century, bicycling had become a significant factor in women's emancipation (Herlihy, 2004). Individual mobility helped women independently move from the private sphere to what used to be a male-dominated public sphere. Other women whom I interviewed also said that bicycling is an empowering experience in many ways to this day. Veronica says that her bicycle allows her to be self-dependent day and night in that she does not have to work her schedule around public transportation's time and location limitations. She claims that because of bicycling she feels empowered, as she is able to travel farther on her own time and rely on her body alone:

I have never really worried about my safety when I am on a bicycle... Mostly at night ... you ride in the middle of the street so that no one can jump at you from the sides of the street ... It totally revolutionizes where you can go at night. Because you don't have to walk, and taking the bus at night is sketchy by yourself, like bus stops, and then you still have to walk from the bus stop to your house ... Biking completely revolutionizes where you can and cannot go. I think that is pretty significant. At least, it has been for me ... I feel really safe on my bike. I think that is a special type of empowerment that women can get from a bicycle for sure.

Other than the motivations reported above, the two highest strongly-agreed statements in the 2012 online survey were "It is simply fun to ride together with other bicyclists" (78.3%) and "I enjoy the city in a way I cannot enjoy otherwise" (65.2%). In the interviews too, people overwhelmingly used the word "fun." One informant said that "streets are our playground." Thus, bicycling is not chosen over driving only for functional or political reasons; people also enjoy feeling the fresh air and being in direct contact with the people around them and their surroundings. However, the streets are only enjoyable in these ways if the danger of automobile traffic is eliminated.

The whole range of motivations listed above explain why people care about being able to bicycle not only during CM, but also in everyday life: unwillingness to support an economy that degrades the environment and causes wars, desire to live in an urban environment in which one can be physically active, not having to depend on automobiles and consumption of oil, ability to experience the streets as social and fun places, and the right to a healthy environment are some of the examples. These various social, ideological, and practical reasons unite bicyclists in their right claims to the streets. Bicyclists' counterdiscourse challenges automobiles' hegemony in the city and raises questions about how urban planning can better serve a society with plural publics.

The right to the city and counterspaces of bicyclists

Automobility is so well entrenched in everyday urban life it leaves little room for any other transportation mode. Choosing insurgent ways to gain access to streets and occupying them collectively with their bodies indicates bicyclists' frustrations. By participating in the CM rides, bicyclists explicitly demand their right to the city, while producing their counterspaces.

Harvey (2008, 23) interprets the right to the city as the "freedom to make and remake ourselves and our cities." Mitchell (2003) adds that, in practice, the extent to which citizens have right to the city is defined by the social production of and control over public spaces. To a certain extent, CM rides allow bicyclists to take control over the streets and remake the cities. Lefebvre (1991, 381-382) argues that "when a community fights the construction of urban motorways or housing developments, when it demands 'amenities' or empty spaces for play and encounter, we can see how a counter-space can insert itself into spatial reality." During the rides bicyclists negotiate their everyday access to streets and challenge the automobiles' status quo on the roads. As participants of CM rides appropriate urban streets that are usually occupied by motor vehicles, they enact counterspaces in both temporary and permanent ways.

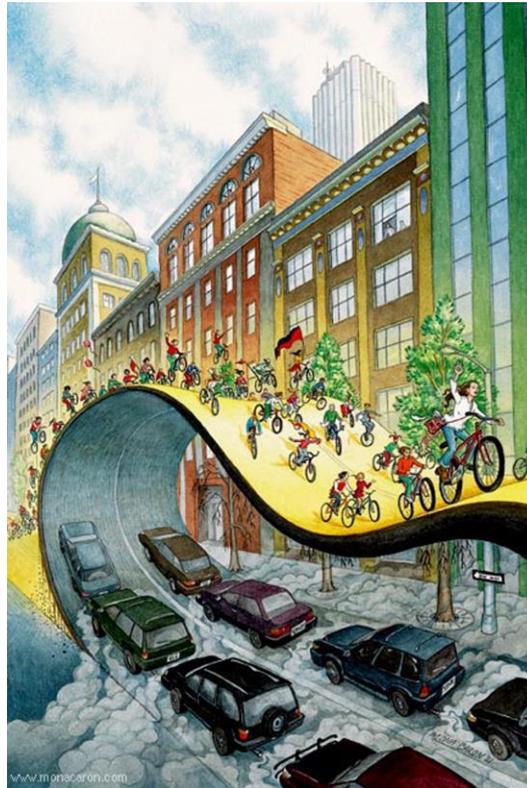


Figure 5. Mona Caron's (2002) illustration on the cover of a book titled *Critical Mass: Bicycling's Defiant Celebration*.

Mona Caron's illustration metaphorically depicts the counterspaces of CM bicyclists (Fig. 5). In her illustration, automobiles and their exhaust are trapped by the road that accommodates bicyclists. It depicts the turning of streets upside down and the subversion of automobiles' hegemony. During CM rides, bicyclists subvert the everyday experience of the streets for the time they collectively ride; motorists, rather than bicyclists, feel subordinated because they cannot drive the same speed they usually do. Bicyclists play music, talk to one another, and reintroduce play, fun, and a sense of community into the streets. Passersby wave to the bicyclists, and many motorists even show their support. The experiences generated by the CM rides are counter to what modern streets typically offer. The ride corresponds with the commute hour, challenging modernity's work/non-work time dichotomy (Debord, 1994) and replacing it with time for fun. The efficiency of the automobile, a symbol of modernity, becomes greatly reduced.

Seeming like street theater, the CM rides dramatically demonstrate what the streets might be like with fewer automobiles and more bicycles. CM riders communicate their ideas in the public sphere by enacting them, rather than by only talking about them. With such temporary changes in spatial experience, CM introduces new cultural codes, challenges existing ones, and culminates in a social, cultural, and physical transformation.

The bicyclists' collective resistance against the mayor's attempt to control the ride in 1997 was a significant factor in easing the local government's attitudes towards CM rides in the long run and perhaps paved the road for other grassroots and non-profits with similar interests. The San Francisco Chronicle reported that right after the chaotic July 1997 ride, Parking and Traffic Commission member Sharon Bretz came up with a number of proposals to ease the conflict between bicyclists and motorists. One of these proposals was to ban privately-owned vehicles on

Market Street (Martin and Epstein, 1997). Mayor Brown's successor, Gavin Newsom, did not follow in Brown's footsteps and presented a friendlier attitude towards CM and similar movements that challenged the automobile's hegemony.

Bicyclists' interest in access to streets for collective rides is growing and taking different forms. Those who prefer not to associate themselves with the anarchistic aspects of CM have created different, less confrontational kinds of grassroots rides: The East Bay Bike Party (a party/ride that started in San Jose and attracts thousands of people), Berkeley moonlight bike rides, community rides in Richmond, San Francisco Midnight Mystery Ride, and Butterlap Ride to name a few.

Bike advocacy has grown significantly in the last couple of decades. The SFBC's membership increased from 116 people to over 11,000 people between 1992 and 2011 (SFBC, 2011). Through its members' support, the coalition, among other things, has provided bicycle access to mass transit, helped extend the bicycle network, and organized communities to close Golden Gate Park to automobile traffic on Saturdays, according to its website.

Overall, the city of San Francisco is more bicycle- and pedestrian-friendly today than it was 20 years ago. SFMTA (2012) reports that 75,000 trips are completed on bicycles each day out of over two million total trips by various transportation modes. The city today accommodates over 129 bike lanes and shared roads, and more projects are being planned (SFMTA 2012). Moreover, according to *Bicycling and Walking in the United States: 2012 Benchmarking Report*, San Francisco is now the 4th highest ranked city in the country for biking commute share and the 6th safest city in which to bike.

In recent years the city has been an active partner in the social, cultural, and physical transformation of San Francisco. The city's offices have been collaborating with a non-profit membership organization, Livable City, and SFBC to organize *Sunday Streets* events since 2008. *Sunday Streets*' organizers close a different section of the city to automobile traffic on selected Sundays and provide safe access to bicyclists and pedestrians. The event is attended by an estimated 25,000 people on average. The city started the *Pavement to Parks Program* in 2009 in order to increase the amount of public space in the city. As part of this project, five new plazas and 31 *parklets* have been built so far [Fig. 6]. *Parklets* are extended sidewalks with seating amenities that are constructed onto on-street car parking spaces. The parklets project was a result of the city's collaboration with Rebar, an interdisciplinary studio that initiated Park(ing) Day, which is an event that encourages residents to occupy on-street car parking spaces by paying the meter and transform them to temporary public spaces. It is another grassroots event that originated in San Francisco in 2005 and is now celebrated in 140 cities worldwide.



Figure 6. A parklet on Valencia Street in San Francisco (photography credit: author)

There is no objective way to tell how much of San Francisco's social and physical transformation may be attributed to CM alone. Nevertheless, CM rides have played a pivotal role in challenging automobile culture in San Francisco and around the world and in transforming San Francisco into a more bicycle-friendly city as bicyclists continuously demonstrate their urban demands through protest/festival-like rides. By appropriating streets every month, CM bicyclists have carried their counterdiscourses about urban form into the public sphere in an attempt to make the processes of production of urban space more democratic and inclusive.

The case of CM bicyclists demonstrates that automobile-oriented planning marginalizes publics that are primarily identified on the basis of their lifestyle choices, while these publics are not always part of the commonly recognized disadvantaged populations that dominate the spatial justice literature. Yet, the multiple motivations, such as those related to cost, health, play, community, empowerment, and political choices, underlie the right to the city (and streets) demands of bicyclists, and together they indicate the need to make streets more inclusive. The extent of the variety of users and uses that a city accommodates defines the extent to how *just* that city may be. Greater spatial justice depends on expanding the understanding of the right to the city to include constituencies such as bicyclists, whose shared values and lifestyles identify their demands on urban space.

Acknowledgements

I would like to thank the organizers of "Toward a Just Metropolis: From Crises to Possibilities 2010," as the initial draft of this research was first presented at that conference. I am also indebted to Yael Allweil, Galen Cranz, Nathan Sayre, and Andy Shanken for their critical comments on the paper.

About the Author: Lusi MORHAYIM, University of California, Berkeley, Department of Architecture

To quote this paper : Lusi Morhayim, " From counterpublics to counterspaces: Bicyclists' efforts to reshape cities", [« Des contre-publics aux contre-espaces : Les efforts des cyclistes pour remodeler les villes », translation : Guénaëlle Marquis], *justice spatiale | spatial justice*, n° 5, déc. 2012-déc. 2013 | dec. 2012-dec. 2013, <http://www.jssj.org>

References

- BAY AREA CENSUS**, *San Francisco Bay Area 2000-2010*, <<http://www.bayareacensus.ca.gov/bayarea.htm>>, [Accessed 4 April, 2012].
- BEDNO Andrew. n.d.**, *Chicago Critical Mass Route Archive*. Available online at: <<http://bedno.com/ccm>>, [Accessed 26 March 2011].
- BENNETT W. Lance**, "The Uncivic Culture: Communication, Identity, and the Rise of Lifestyle Politics". *PS*. 31 (4), 1998.
- BICYCLING AND WALKING IN THE UNITED STATES: 2012 BENCHMARKING REPORT**, Alliance for Biking & Walking, <<http://www.PeoplePoweredMovement.org>>, [Accessed 4 April, 2012].
- BLICKSTEIN Susan, HANSON Susan**. "Critical mass: forging a politics of sustainable mobility in the information age". *Transportation*. 28 (4): 347-362, 2001.
- CARLSSON Chris.**, eds., *Critical Mass: Bicycling's Defiant Celebration*, Edinburgh, Scotland, AK Press, 2002.
- CARON Mona**, n.d., Ecology Emerges flyer. [illustration]. Available online at <<http://monacaron.com/posters/ecology.shtml>>, [Accessed 15 March 2011].
- CARON Mona**, 2002, Book cover of *Critical Mass: Bicycling's Defiant Celebration*, edited by Chris Carlsson. [illustration]. Available online at <<http://monacaron.com/images/html/critical-mass-cover.html>>, [Accessed 15 March 2011].
- CENTERS FOR DISEASE CONTROL AND PREVENTION (U.S.)** (1996). *Physical activity and health: a report of the Surgeon General*. Atlanta, GA, U.S. Dept. of Health and Human Services, National Center for Chronic Disease Prevention and Health Promotion. Available online at <<http://www.cdc.gov/nccdphp/sgr/pdf/execsumm.pdf>>, [Accessed 18 May 2011].
- CENTERS FOR DISEASE CONTROL AND PREVENTION (U.S.)**. (2011). *Obesity trends among U.S. adults between 1985 and 2010*. [Atlanta, GA], Centers for Disease Control and Prevention. Available online at: <http://www.cdc.gov/obesity/downloads/obesity_trends_2010.pdf>, [Accessed 18 May 2011].
- DEBORD Guy**, *The Society of the Spectacle*, New York: Zone Books, 1994. **EDWARDS Paul**, "Infrastructure and Modernity: Force, Time and Social Organization in the History of Sociotechnological Systems", in *Modernity and technology*, edited by in Thomas J Misa, Philip Brey, Andrew Feenberg, 185-225. Cambridge: MIT Press, 2003.
- EPSTEIN Edward**, 1997. Bike Fiasco Points Up S.F. Mayor's Transit Errors - Brown has had trouble taming city's road rage, *The San Francisco Chronicle*, 31 July, p.A15. Available online at: <<http://docs.newsbank.com>>, [Accessed 23 January 2011].
- EPSTEIN Edward, MARTIN Glen**, 1997. Brown Wants Mass Riders to Go to Jail - Lawyers volunteer to defend arrested cyclists, *The San Francisco Chronicle*, 28 July, p.A1. Available online at: <<http://docs.newsbank.com>> [Accessed 23 January 2011].
- FAIGIN Daniel P.**, 2006. The History of San Francisco Bay Area Freeway Development, California Highways, Available online at: <<http://www.cahighways.org/maps-sf-fwy.html>> [September 14, 2012].
- FRASER Nancy**, "Rethinking the public sphere: A contribution to the critique of actually existing democracy", in *Habermas and the Public Sphere*, edited by Craig J Calhoun, 109-42. Cambridge: MIT Press, 1992.
- GOTSCHI Thomas, MILLS Kevin**, "Active transportation for America: The Case for Increased Federal Investment in Bicycling and Walking", *Rails-to-Trails Conservancy and Bikes Belong Coalition*, 2008. Available at: <http://www.railstotrails.org/resources/documents/whatwedo/atfa/ATFA_20081020.pdf>, [Accessed 12 May 2011].
- HABERMAS Jurgen**, *The Structural Transformation of the Bourgeois Public Sphere: An Inquiry into a Category of Bourgeois Society* [trans. Burger T], Cambridge: MIT Press, 1962.
- HARVEY David**, "The Right to the City," *New Left Review*, vol. 53, September-October 2008.
- HERLIHY David V.**, *Bicycle: The History*, New Haven: Yale University Press, 2004.

- KING John**, Brown Wants To Put Brakes On Mass Bike Ride, *The San Francisco Chronicle* July 1997, p. A1. Available online at: <<http://docs.newsbank.com>>, [Accessed 23 January 2011].
- LADD Brian**, *Autophobia: Love and hate in the automotive age*, Chicago: University of Chicago press, 2008.
- LEE Henry K., EPSTEIN Edward**, 1997. New S.F. Police Warning To Renegade Bike Riders - Get tough stance has its doubters, *The San Francisco Chronicle*, 30 July, p. A13. Available online at: <<http://docs.newsbank.com>>, [Accessed 23 January, 2011].
- LEFEBVRE Henri**, *The Production of Space*, translated by Donald Nicholson-Smith, Oxford: Blackwell, 1991.
- LEFEBVRE Henri, KOFMAN Eleonore, and LEBAS Elizabeth**, *Writings on cities*. Cambridge, Mass, USA, Blackwell Publishers, 1996.
- MARTIN Glen, EPSTEIN Edward**, 1997. Ban Market Street Autos, Parking Official Proposes - She responds to Critical Mass mess, *The San Francisco Chronicle* 29 July 1997, p. A1. Available online at: <<http://docs.newsbank.com>>, [Accessed 23 January, 2011].
- MATIER Philip, ROSS Andrew**, 1997. Defiant Bicyclists To Snub S.F. Mayor - They boycott talks, plan to ride Friday, *The San Francisco Chronicle* 21 July, p. A1. Available online at: <<http://docs.newsbank.com>>, [Accessed 23 January, 2011].
- MCDONALD-WALKER Suzanne**, *Bikers: culture, politics and power*. Oxford, Berg, 2003.
- MELVILLE Raymond**, 1997. "Letters to the Editor", *The San Francisco Chronicle*, 29 July 1997, p. A20. Available online at: <<http://docs.newsbank.com>>, [Accessed 18 May 2011].
- MITCHELL Don**, *The Right to the City. Social Justice and the Fight for Public Space*, New York: The Guilford Press, 2003.
- MORITZ William, E.** "Survey of North American Bicycle Commuters: Design and Aggregate Results", *Transportation Research Record 1578*, TRB, National Research Council, Washington, D.C., 91-101, 1997. Available online at: <<http://trb.metapress.com/content/wq87468051446611/fulltext.pdf>>, [Accessed 5 April 2012].
- OJA Pekka, VUORI Ilkka and PARONEN Olavi**, "Daily walking and cycling to work: their utility as health enhancing physical activity," *Patient Education and Counseling*, vol. 33, p. S87-S94, 1998.
- PAN L., et al.** "Differences in Prevalence of Obesity Among Black, White, and Hispanic Adults - United States, 2006-2008," in *Morbidity and Mortality Weekly Report*, National Center for Chronic Disease Prevention and Health Promotion, CDC, 58 (27), pp. 740-744, 17 July 2009.
- PUCHER John, BUEHLER Ralph**, "Making Cycling Irresistible: Lessons from the Netherlands, Denmark, and Germany," *Transport Reviews*, vol. 28, no. 4, pp. 495-528, July 2008.
- PUCHER John, BUEHLER Ralph**, "Walking and cycling for healthy cities," *Built Environment*. 36, 391-414, 2010.
- SAN FRANCISCO BICYCLE COALITION (SFBC)**, *SFBC Membership*. Available online at: <<http://www.sfbike.org/>> [Accessed 20 March, 2011].
- SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA)**, 2008, *State of Bicycling Report*, City of San Francisco. Available online at: <http://www.altaplanning.com/App_Content/files/fp_docs/SF-State-of-Cycling.pdf>, [Accessed 4 April, 2012]
- SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA)**, 2011, Bicycle Count Report, City of San Francisco, December. Available online at: <http://www.sfmta.com/cms/rbikes/documents/2011BicycleCountReportsml_002.pdf>, [Accessed 4 April, 2012].
- SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA)**, 2012 Current and Upcoming Project Information, updated June 1, 2012. Available online at: <<http://www.sfmta.com/cms/bproj/27370.html>>, [Accessed 25 June, 2012].
- SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY (SFMTA)**. 2012, State of Cycling Report, Available online at: <http://www.sfmta.com/cms/rbikes/documents/2012StateofCyclingReport8_9_12.pdf>, [Accessed 15 September, 2012].
- SINGER, Andy**, n.d., Driving / Non-driving Divide Cities [illustration online] Available at: <http://www.stickergiant.com/divide-cities_mcs169.html> [Accessed 1 March 2011].
- SOJA, Edward. W.**, *Seeking spatial justice*. Minneapolis, University of Minnesota Press, 2010.
- SWANSON James R.**, n.d., [illustration] in Josh Wilson, "Unleashing Public Imagination", in *Critical Mass: Bicycling's Defiant Celebration*, edited by Chris Carlsson. Edinburgh, Scotland, AK Press, 2002.

UNDERWOOD Deborah, "Letters to the Editor", *The San Francisco Chronicle*, 8 July 1997, p. A16. Available online at: <<http://docs.newsbank.com>>, [Accessed 23 January, 2011].

UNITED STATES CENSUS BUREAU, San Francisco County, California Census 2006-2010. Available online at: <<http://quickfacts.census.gov/qfd/states/06/06075.html>>, [Accessed 6 April, 2012].

UNITED STATES DEPARTMENT OF TRANSPORTATION, Federal Highway and Administration, Pedestrian and Bicycle Information Center. *The National Bicycling and Walking Study: 15-Year Status Report*, May 2010.

URRY John, 'The "System" of Automobility', *Theory, Culture & Society* 21(4/5): 25-39, 2004.

WHITE Ted, (1992). *Return of the Scorcher*, San Francisco, CA, Video Project.

WHITE Ted, (1999). *We aren't blocking traffic, we are traffic!* San Francisco, CA, Video Project.

WHITE Ted, "Reels on Wheels", in *Critical Mass: Bicycling's Defiant Celebration*, edited by Chris Carlsson. Edinburgh, Scotland, AK Press, 2002.

WILCOTT, Steven, "Letters to the Editor", *The San Francisco Chronicle* 28 July 1997, p, A20. Available online at: <<http://docs.newsbank.com>>, [Accessed 18 May, 2011].