Understanding Bicycle Communities: Indicators and Propagators of Progressive Cities

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2014

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Acknowledgements

I would like to thank my family for their unwavering support of my academic career, regardless of whether it seemed like I was off route.

Thanks to Liz Safran and Jim Proctor for nurturing my curiosity and giving me incredible opportunities to take my studies further. Thank you for believing in me when even I had given up on myself, and thank you for giving me opportunities that I did not know I even wanted. The Environmental Studies Program has treated me well.

Thank you to all who have sat down and answered my questions, fielded my emails, and taken my survey, especially Mayra Cardoso, Daysi Rivera, Manuel Larriva, Margarita Arias, Ana Isabel Idrovo, y Los Cabreras. And I thank the Andrew W. Mellon Foundation for funding my studies in Cuenca.

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ABSTRACT

In this paper I explain how the bicycle has come to be an important indicator and propagator of a progressive city. Though the bicycle might be seen as environmental, economically beneficial, and healthy, these compartmentalized connotations have been wound together to transform the bicycle into a larger symbol of progressive ideals. Cities across the globe have embraced bicycles in an effort to attract this new socioeconomic class of knowledge workers named the "creative class." I examined Portland, Oregon and Cuenca, Ecuador through semi-formal, expert interviews and a public survey to explore how each uses bicycles to gain this particular status. These locations offer two different perspectives to situate the study of the bicycle as a reputation-building tool. As "America's Bicycling Capital," Portland is a relatively mature bicycle community, while Cuenca is just beginning. I found that the meanings of the bicycle were more varied in Portland, and Cuenca's motivation for propagating the bicycling community as a reputation-building tool has significantly impacted infrastructure decisions, arguably for the worse.

INTRODUCTION

"Like dogs, bicycles are social catalysts that attract a superior category of people."

-Chip Brown¹

Though Brown was writing about his early days as a bike messenger in New York City, he touches on a key aspect of bicycling that is more relevant than ever. Environmentalists struggle with motivating people. Whether it is a recycling campaign aimed at apartment-dwellers or an effort to lobby the local government for solar tax breaks, the business of being an environmentalist is about getting others to change their behavior. The issue of efficacy in small-scale recycling or distributed solar projects is a separate question, out of the scope of this essay, but this issue of bicycles as a social attractor is worth investigating. Bicycles are an interesting case. They have environmental connotations, but they are used widely by those who do not identify as environmentalists by any means. These simple machines have served as a rallying point for people of all backgrounds to come together for decades. What motivates people to not only ride bicycles themselves, but try and motivate others to do the same?

People have framed the bicycle in a variety of ways over its 130 year history. It has been an environmental savior, an economic boon, and a feminist rallying point, among others. Though these individual meanings are interesting in and of themselves, there are larger and broader threads that bicycles now connote. Instead of signifying individual themes like autonomy, environmentalism, or public health, some recognize the holistic nature of these connotations. Indeed, these themes have been wound together to signify an entire lifestyle and identity. The bicycle has become a stand-in symbol for all things *progressive*. One anthropologist in particular has dealt with the bicycle's importance to identity and lifestyle for British environmentalists. Dave Horton describes the bicycle as the only untarnished environmental symbol left. Other "green" practices like recycling and growing organic food have seen their fair share of criticism, but bikes remain a rallying point for environmentalists. The "greens," as he puts it, embraced the bike on the coattails of 70s era environmentalism. E F Schumacher's Small is Beautiful and Ivan Illich's Energy and Equity propelled the bicycle into the forefront of the American public. It was a representation of living slowly, using appropriately scaled technology, and reaching ultimate efficiency in these authors' minds. It was a part

¹ Brown, Chip. "A Bike and a Prayer." Transportation Alternatives.

http://www.transalt.org/files/resources/blueprint/features/bikenprayer.html.

² Furness, Zack. 2010. *One Less Car*. Philadelphia, Pennsylvania: Temple University Press.

of a lifestyle that the authors were prescribing. Illich writes, "Free people must travel the road to productive social relations at the speed of a bicycle." The bicycle was an antithetical symbol to the gasguzzling car during the decade, and it symbolically opposed a continually increasing pace of life brought on by the automobile. Horton notes that the bicycle has become more than an environmental symbol to these environmentalists. Rather, it is a signifier of a type of lifestyle. Riding a bike around gives an activist credibility to their claims of ideology. Bicycles have grown away from pigeonholed, disciplinary boundaries towards a lifestyle tool. But who and what are the driving forces behind building a bicycle community, and what motivates them? Why is there a sudden interest in bicycling infrastructure from traditionally bike-unfriendly cities like Indianapolis?³

The answer lies in the adoption of the bicycle by a certain group of people. Though the idea of a lifestyle heavy on bicycle use is not new, there is a newfound acceptance of the type of people that bicycle, particularly by city officials and urban planners who decide how the city might brand itself. More and more public bike share systems are popping up around the world, and bike lanes and cycle paths are now on tourism brochures. I would posit that few city staff may actually care about providing great cycling conditions for traditional reasons like public health or environmental benefits. No, these people largely lean toward economic reductionism: the bicycle and its connotations of progressivism are the means to a young "creative class" that can fuel the economy for years to come. 4 Proposed by Richard Florida in the early 2000s, the creative class is a new socioeconomic class defined by a super creative core focused on bringing innovative products to market and creative professionals that draw on higher knowledge to solve problems. Typical job areas are in design, art, new media, healthcare, technology, business, and education.⁵ This new effort to promote cycling is not uncommon, though. Cities all across America have taken to bringing in bike-friendly infrastructure in an effort to stand out. Bicycle friendliness has become a status symbol for cities. Indeed, an increase in bicycle commuting is correlated with creative class jobs, higher education, and happiness. Now bicycle infrastructure is used to attract residents—it is a function of moving human capital.

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³ Howard, David. "A Conversation with Greg Ballard." Bicycling.

http://www.bicycling.com/news/advocacy/conversation-greg-ballard.

⁴ Ibid.

⁵ Florida, R. (2002). The Rise of the Creative Class: And How it's transforming work, leisure, community and everyday life. New York: Perseus Book Group.

⁶ Florida, Richard. 2011. "America's Top Cities for Bike Commuting: Happier, Too." *The Atlantic*. June 22. http://www.theatlantic.com/national/archive/2011/06/americas-top-cities-for-bike-commuting-happier-too/240265/.

When I argue that people are now using bicycles to promote progressive ideologies, I define progressive to be: (of a group, person, or idea) favoring or implementing social reform or new, liberal ideas. My focus is primarily on the social reform aspect. I illustrate in this essay how bicycles have historically been used in changing cities' reputations and how bicycles in both Portland and Cuenca are being used as tools to employ progressive design principles, partially to attract human capital in the form of the creative class. Certainly, the economic benefits are not the entire story, but they seem to be an increasingly important impetus for the adoption of new bicycle infrastructure in the United States. There are also other ways that bicycles are indicative of progressive values. I would argue that bicycles are a useful tool for cities to create a progressive reputation through social reform and a proliferation of liberal ideas. Indeed, they have a history with social reformation through supporting human-scaled design, urbanity, density, educational hubs, equality (if not diversity), and a knowledge-based economy.

Bicycles have had a long history as a tool for cities to build reputations. Using bicycles as a regional status indicator is not a new phenomenon. The start of this trend goes back to the invention of the modern bicycle. The modern safety bicycle was invented in the mid-1880s in Paris. It was not a completely new design, but it incorporated a few new technologies in a way that nobody had before. At the time, manufacturers and their mechanics would advertise their bicycles via journeys to nearby cities. Cities near manufacturing hubs were prime markets for the new bicycles, and everyone in the business sought to expand. Young men would make multi-day journeys, showcasing the new technology coming from Paris. Town centers were sometimes filled to watch weary travelers pedal into town. This showcasing and display was first and foremost a marketing strategy of the manufacturers, but it was also a proud display of technology and engineering prowess. Paris' bicycle community boomed as other cities in the neighboring countries raced to match the technologies.

In America, one major bicycle magnate, Albert A. Pope, was a leader not only in bicycle production techniques, but also in bicycle infrastructure. He sought support from powerful business allies and politicians to create a network of paved roads to ride on. The Boston Bicycling Club was the first of its kind in America, and "[Pope] even paved a stretch of Boston's Columbus Avenue at his own expense to showcase the benefits of asphalt." Boston became a purveyor of infrastructure and technology under Pope, and it gained a reputation as a bicycling hub in America. People came to know Boston as the leader in bicycle infrastructure, advocacy, and production.

⁷ "Definition of Progressive." Oxford Dictionaries.

http://www.oxforddictionaries.com/us/definition/american english/progressive.

⁸ Herlihy, David V. 2004. *Bicycle: The History*. New Haven: Yale University Press.

Similarly, bicycles were not just indicators of progressive cities, home to new and exciting technologies and social phenomena, but they have also been historically used to spread social reform in a very direct way. Today, they might be more symbolic or metonymic tools of spreading progressive ideals, but there is a long tradition of using the bicycle for direct social and political reform. In the 1890s, women often wore ankle-length skirts or dresses, but to comfortably ride a bicycle, women adopted bloomers and went without corsets. This caused a raucous response from the largely male-dominated media. Bloomers were too masculine and "unladylike," they argued, but women held fast and rallied around the bicycle as a justification for their move toward equality. Bicycles were popular with suffragists like Susan B. Anthony, who famously said, "[the bicycle] has done more for women's emancipation than anything else in history. It gives women a feeling of freedom and self-reliance. I stand and rejoice every time I see a woman ride by on a wheel...the picture of free, untrammeled womanhood."9 At the same time in Britain, the Clarion Cycling Club was using the bicycle as a vehicle to spread their socialist propaganda. They roamed around England, selling and giving away social newspapers and essays. This club even wrote The Scout, a manual on effectively targeting and mobilizing workers with their messages via bicycles. 10 But if the bicycle has had a long history with building citywide status and spreading progressive ideals, how are bicycles used today by cities?

METHODOLOGY

To answer this question, I situated my study in Portland, Oregon and Cuenca, Ecuador. Both cities are actively branding themselves as bike-friendly cities. Portland has a much longer history with working to build a bicycle community. They have been relatively successful, and they have dubbed themselves "America's Bicycle Capital." Portland has a much more *mature* bicycle community than Cuenca does. In comparison, Cuenca, a colonial town nestled in the mountains, just created an active transportation department four years ago. It is more of a *nascent* bicycle community. Each locale is working toward generally the same goal, though I argue that their different histories have produced significant differences in infrastructure and conceptions of the bicycle. In each city, though, the bicycle holds similar meanings as a tool for a progressive lifestyle. At the very least, the bicycle is *indicative* of social progression, if not the *cause* some of it as well.

⁹ Herlihy, David V. 2004. Bicycle: The History. New Haven: Yale University Press.

¹⁰ Furness, Zack. 2010. *One Less Car*. Philadelphia, Pennsylvania: Temple University Press.

¹¹ "Downtown Portland's New 'Bicycle Capital' Mural: Will It Become as Famous as 'Keep Portland Weird'?" *The Oregonian - OregonLive.com*.

http://blog.oregonlive.com/commuting/2012/07/downtown_portlands_new_bicycle.html.

To compare the differences between the mature community and the burgeoning one, I conducted semi-formal, expert interviews and a short survey. The expert interviews were semi-structured: I focused on changes in social norms or attitudes, meanings of the bicycle, and the local government's role in creating or supporting the bicycle community. I interviewed Jaime López Novillo, a local, outspoken bicycle activist and advocate. I spoke to Margarita Arias, who is a co-founder of the local bike activist group, Biciñan. Jaime Astudillo Romero and I spoke at length. He is the former rector of the local public university, and he now runs an organization called Cuenca Ciudad Universitaría. I spoke with Manuel Larriva, who runs the active transportation branch of the transportation department. I interviewed former engineering professor and historian Galo Ordoñez and former local cycling legend Mario Polo Eljuri. I interviewed my boss at the time, Ana Isabel Idrovo, who owns a local bike shop and has a long and decorated downhill mountain biking career behind her. I spent many hours with my co-workers, Carlos Aucapina and Sebastian Guzman talking about the downhill mountain biking scene, and I interviewed our sponsored downhill mountain biker Alexandra Serrano. I also met Olympichopeful triathlete Javier Enderica and interviewed him at his training complex. The bicycle-mounted division of the local police force and the Red Cross also agreed to interviews.

In an effort to make my interview subjects more comfortable, I always asked where they would prefer to conduct the conversation. Some were in coffee shops, others were in their homes, and others were at their places of work. I recorded the majority of my interviews with my phone when the subject consented. Those that denied my request to record allowed me to take notes. Each interview was roughly an hour long, though some of the following vignettes were conveyed in less-formal interactions, whether it was during work, class, or over a casual lunch. I was also an active participant in the community, attending group rides and working as a mechanic at MyBike, a locally owned shop. I have also left out certain parts of interviews at the request of the interviewees.

Certainly, I cannot say that I gained the trust of my interviewees in the short span of hours. I will argue that my position as a student certainly allowed some candid-ness that might not have been present had the interviewee assumed that the report would be more influential and broadly read, as sad as that makes out the role of a student thesis. In Cuenca, my ability to speak Spanish at a passable level instantly afforded me more respect than had I only spoken English, but as a white person, my credibility was still dubious—I was undoubtedly an outsider.

In Portland, I think my status as a lowly undergraduate researcher made it harder to wrangle some of the key actors in the bicycle community. I was brushed off via email multiple times, and phone

attempts ended with a voicemail more often than not. That said, I was able to interview some relevant people, and the majority of important actors in Portland's bicycle community are rather public figures who have work available in print or on the web. Indeed, Portland's status as a rather mature bicycle community has already attracted a fair amount of attention and research. Thus some of the basic questions I had in Cuenca were easily answered by a book or report in Portland. For other issues, I had to talk with people in the community.

I met with Kiel Johnson, who owns Go By Bike. I interviewed Bikes4HumanityPDX board-member Steven Kung. I met with the CEO of the Community Cycling Center, Mychal Tetteh, and I met with the owner of Sellwood Cycles, Erik Tonkin. I exchanged emails with local activist Elly Blue, and I briefly spoke with Joe Biel, the owner of Microcosm Publishing. I spoke briefly with transportation researchers Jennifer Dill and Jon Makler in addition to interviewing author Jeff Mapes. I am also a local participant of bike-related activities, and I have been in close contact with employees of the Bicycle Transportation Alliance, where I serve as an intern.

In addition to interviewing local actors in both Cuenca and Portland, I conducted short, openended surveys about the *meaning of the bicycle* and *why or why not people ride*. The survey instruments are available in the appendix. In Cuenca, I followed the survey locations of the sole previous bicycle study conducted by Movére, a Quito-based consulting firm. The locations are also shown in the appendix. In general, they were public, pedestrian-friendly locations like open markets, town centers, and universities. I tried to recreate the same geographical distribution in Portland, but in certain areas, there was a distinct lack of high-traffic pedestrian areas, namely in the east side. I aimed for a high quantity of responses. I had 480 respondents in Cuenca and 240 in Portland. Out on the street, I approached anybody and everybody that looked over 18 to take my survey. Most of them were on foot, though a small number (~15) were on bicycles. Each question was optional, and some participants chose to skip certain parts, thus some of the later graphs will show differing numbers of responses for each question. The surveys were completely anonymous, but I was indeed in the vicinity while they filled out the questionnaire. Certainly, some bias may have influenced the data that way, but I believe it to be minimal. In general, I cannot assume that my limited geographic and demographic stratification can be extended to the population, but I did manage to survey a large number.

Most transportation research instruments feature check-boxes with line items that participants can mark if that particular answer applies to them. I believe that these suggestions for answers influence results by constraining the possibilities. To assuage these concerns, I left the answers open-ended, and I

later coded the responses according to key words or phrases that indicated reasons for riding such as: exercise, fun, environmental benefit, freedom, time-savings, or money-savings. All categories are listed in the figures below.

Richard Sennett and Jonathan Cobb's The Hidden Injuries of Class informed my interview analysis process. The major threads within the interviews were teased apart and considered under varying assumptions and lenses. I took a broad approach, shunning constricting frequency analyses in favor of extracting deeper meanings and assumptions behind motivations to ride. I asked them straightforward questions, because I wanted to get at the heart of some of the larger themes within bicycling. I probed motivations to ride. I asked why bicycle riders tend to be rather evangelical. I questioned why there was or was not a mature bicycling community. I asked what they thought everyone else's motivations were for various policies, projects, and parades. I asked whether the bicycle is really an effective tool for social or environmental change. In an effort to receive candid answers, I was openly explicit about my position. I situated myself as a person who enjoys riding bicycles and believes them to be largely good, but I was still skeptical. As a part of my analysis, I assumed that people's rhetoric and assumptions can be reflective of their broader experiences, and that their stories and interactions surrounding the bicycle might provide commentary and insight on larger, societal issues. For example, I believed Margarita Arias' assurance that women were treated differently in the Cuenca cycling community more than older men's assertions that everyone was treated equally because of her experience as a woman. In general, my analysis of the interviews is certainly subjective, and due to the focus of this essay, many aspects were left out, but I believe my interpretation to be an important part of the story of bicycling communities across the Americas. My analysis explains that bicycles are being used as an indicator of an amenity-heavy, livable city in order to attract the "creative class."

STUDY AREAS

As stated earlier, I chose Portland and Cuenca because they are at different growth stages regarding their bicycle communities and because of my personal proximity to them. Most of Portland's bike activism started in the mid-70s, and Cuenca's first steps were arguably just a handful of years ago. With this difference, I can compare policies, infrastructure, and attitudes within a mature-nascent framework. In order to access some of these comparisons, a short historical background is necessary.

Cuenca

Despite hovering just below the equator roughly on the 3rd parallel, Cuenca's climate is closer to Portland than one might assume. This similarity is the product of elevation differences. At 8,400 feet, Cuenca's elevation affords it a temperate climate. Across the entire year, temperatures average between low 50s to low 70s, and during the wet season, grey clouds produce an almost daily afternoon sprinkle¹². Cuenca sits in a valley. In fact, the word Cuenca literally means basin or valley in Spanish. But apart from the agricultural hillsides, the city is actually very flat. There are three distinct tiers to the city, descending toward the south. On the surface, Cuenca seems just as good as anywhere to house a bicycle revolution, but when one sees that the top cycling countries in the world like Denmark, Germany, and the Netherlands have harsh winters, the importance of surface-level indicators like climate shrink. ¹³ Though the physical environmental factors may be in their favor, Cuenca's colonial history and recent economic volatility and vitality have not been conducive to cycling.

Cuenca has been the site of two invasions and subsequent colonies. The Incans invaded the native Cañari people after nearly a millennium of existence relatively free from outside influence, and just a half century later in 1550, the Spanish conquistadors invaded the already-colonized city. After the Spanish came, they remained part of the ruling class. Cuencanos were relegated to the lower class. This widened gaps between social groups and helped to form different classes under the conquistadors. The Spanish brought Catholicism. Like most Latin American cities, Cuenca is now largely Catholic, and though there has been a marked change toward "social Catholicism" rather than a devout variation, many conservative values are still deeply entrenched in society. For example, gender roles are much more conservative than Portland. Men often play a powerful and protective role over women. The trend is moving away from these roles, and younger people are quite different from their parents.¹⁴

Fear plays a subtle but tangible role in the attitudes of Cuencanos. Though quick to describe their beloved city as *tranquilo*, Cuencanos just as easily launch into diatribes about the dangers inherent in the city. No new development goes up without either metal bars blocking the entrance to the house or broken bottles cemented in the tops of brick walls. Security guards with sawed-off shotguns stand idly outside every bank. Everybody in the city advises against walking around after dark, especially alone. Dangerous groups of young men control the cities' parks when the moon comes out, and locals rarely

¹² Velasco, Alexandra, and José Ramón Castellar. 2012. "Estudio para la elaboración del plan de ciclovías urbanas y proyecto definitivo para fase piloto y del estudio para el sistema de transporte público en bicicleta de la ciudad de cuenca". Cuenca: Movére.

¹³ City Cycling. 2012. Urban and Industrial Environments. Cambridge, Mass: MIT Press.

¹⁴ Margarita Arias, personal communication.

dare to travel at night. Even on the bus, many young women and men refuse to hop on after dark, opting for taxis instead. Stories circulate about unlicensed taxis abducting young foreigners and sexually abusing them or extorting them. It is impressive that this dichotomy can exist in the minds of so many. For the large majority, it almost seems to be on a light-cycle. During the day, Cuenca is a blissful paradise with flowing rivers and smiling faces. Come night and fear rules. This fear is fading, though. Some nights, instead of gangs congregating at local parks to drink and fight, sometimes young men gather to play late-night *fútbol* under the lights. There is a feeling that things are changing for the better.

The majority of residents live and die in Cuenca. Strong familial ties make it hard for younger generations to start life abroad. The city is spatially small—it takes just twenty minutes to bike across town, and the national government is only just beginning to improve the inter-city roads. This isolation fosters strong social connections to the people of Cuenca as well as to the physical place. Given that traditional gender roles are the norm and women tend to stay at home, they gossip a lot. ¹⁶ During the day, housewives share the day's stories with other women of the household. At nearly every street corner or bank of the river, somebody knows somebody that had a bad time in that spot. Maybe a young boy drowned after a big storm or somebody's cousin was raped in the neighborhood park at night. Whatever it is, Cuencanos know these stories. They even bring them up to fellow natives, not just ignorant and confident foreigners. In this way, the social norms of strong social connections mixed with a small physical space have combined to create a place where perhaps apocryphal stories tangibly influence behavior. I experienced this first hand when walking home at night with Cuencanos. More than a few times, we would leave at a certain time or take a less-direct route around a park instead of walking through, because they had a cousin that was assaulted there years ago around that time of night.

Economic factors have played a significant role in shaping the city as well. Up until 2000, Ecuador used its own national currency. At the turn of the millennium though, growing volatility in the *sucre* led to a huge financial crash. Banks were closed for a long time, politicians were rumored to have stolen millions of dollars, and Ecuador switched over to the US dollar. Before 2000, the *sucre*'s volatility made it hard to secure loans and purchase a car.¹⁷ But after the switch, car ownership skyrocketed, and congestion increased accordingly¹⁸. These days, Cuenca has one of the highest per capita car ownership

¹⁵ Dayana & Marcela Reyes, personal communication

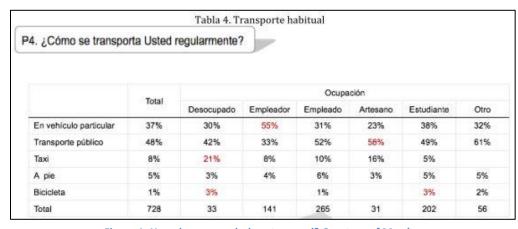
¹⁶ Daysi Rivera, personal communication.

¹⁷ Galo Ordoñez, personal communication.

¹⁸ Ibid.

rates in the country.¹⁹ Nearly one in three of Cuenca's 330,000 people owns a car (up from one in four just five years ago), and sometimes people choose owning multiple cars over owning a home.^{20,21} The idea of the car as a status symbol is clearly present in Cuenca.

The active transportation branch of Cuenca's transportation department commissioned a study on the feasibility of a public bike sharing program recently, and they established some of the first metrics of bicycle ridership in Cuenca.



They reported
that just one
percent of people
regularly use
bicycle as
transportation.
Students and

Figure 1: How do you regularly get around? Courtesy of Movére

unemployed individuals each

reported ridership rates of just three percent. This is contrasted with 37 percent of people who commute in private vehicles and 48 percent of people who regularly take public transportation. (Buses cost just 25 cents to anywhere in the city).

Portland

Located on the 45th parallel at roughly sea level, Portland enjoys a typical Northwest climate. Warm, dry summers give way to relatively mild, wet winters. The city is located at the confluence of the Columbia and the Willamette Rivers. Originally built on resource extraction industries like timber production, the city has diversified into everything from manufacturing firms to high-tech startups. The city is split by the Willamette River but connected by over ten bridges joining the east and west side.

¹⁹ Hubenthal, Andrés. 2010. "Evaluación Del Sector Transporte En Ecuador Con Miras a Plantear Medidas de Mitigación Al Cambio Climático". UNDP.

http://www.undpcc.org/docs/National%20issues%20papers/Transport%20(mitigation)/06_Ecuador%20NIP_transport%20mitigation.pdf.

²⁰ "Diez mil carros entran cada ano al parque automotor de Cuenca." 2013. *El Telegrafo*, Septiembre 19. http://www.telegrafo.com.ec/regionales/regional-sur/item/diez-mil-carros-entran-cada-ano-al-parque-automotor-de-cuenca.html.

²¹ Galo Ordoñez, personal communication.

Portland's population is approximately 600,000 according to US Census Bureau projections from the 2010 census. Its climate provides an abundance of clean drinking water as well as cheap hydroelectric power, and its location in the Northwest situates it in the heart of Douglas Fir-dominated temperate forests. In the United States, Portland has a reputation as a haven for hipsters, artisanal beer, food carts, good coffee, and bikes. Portland also boasts an enviable public transportation system with heavy rail, light rail, and bus components. In terms of culture, there is a certain self-reflexivity that has recently arisen. A new billboard decrying "Keep Portland Weird," is illustrative of the desire to hold on to an authentic and original sense of culture in the city. Portland is often regaled as a great place for young people to live— it is home to multiple public and private universities as well as a bustling music and arts scene.

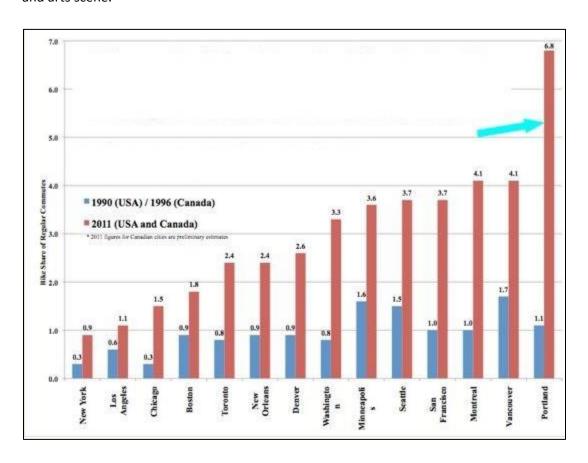


Figure 2: Bicycle commuting rates in North American cities Courtesy of Pucher et al.²²

Portland has seen a veritable boom in commuter cycling in roughly the past two decades. Figure 2 shows Portland's relative growth compared to other cities in the USA and Canada. This commuter rate

²² Andersen, Michael. 2013. "What Caused Portland's Biking Boom?" BikePortland. http://bikeportland.org/2013/07/02/what-caused-portlands-biking-boom-89491.

still hovers just below seven percent across the city today, but with an increasing population, the gross number of commuters is actually increasing despite a relatively stagnant rate.

If the bicycle has long been a tool to build a good reputation and spread progressive ideals, how is it any different in modern times? For one, the bicycle functions more as a symbolic tool. These days, it is a metonymic symbol for a lifestyle and *attracts a certain person*. Surely, the person that they are attracting values a healthy body and a healthy non-human environment, but only recently has that type of person been a significant economic force. Indeed, cities are boasting of new, advanced infrastructure like high-tech bike share systems and contra-flow cycle paths, but these types of improvements are nothing new in the global realm. Countries like The Netherlands and Denmark have been the traditional innovators in bicycle-friendly infrastructure. No, what these American (and I mean both North and South America) cities are selling is the lifestyle that uses high-tech infrastructure like this. For further explanation, I will present examples from Cuenca and Portland through vignettes collected via interviews and personal observation, as well as attitudinal data collected via short surveys.

RESULTS

Cuenca

Dropped Orange Blocks Cuenca's Road to International Cycling Fame

Cuenca's history of cycling starts just like the European and American craze. It was initially adopted largely by young men, and its primary use was as a tool to explore the countryside and display athletic prowess. There exists one written historical account of cycling in the Azuay province, and it was authored by a former head of the competitive cycling regulatory body. Perhaps this may account for the focus on competitive cycling and long excursions.

Cuenca got a later start to the bicycling craze than Europe or America. It was not until 1914 that an enterprising young businessman named Gabriel Eljuri Hanna brought the first bike to Cuenca. This made quite a splash in the bucolic town. People would stop and gather around the few riders and watch as they seemed to glide and dance on two wheels. As with any other new technology, bicycles were an expensive luxury, and only the wealthy elite could afford to ride them. One of the lucky few to master riding techniques was the daughter of Eljuri Hanna. By 1916, Zoila Eljuri Chica was awarded the first documented medal for cycling in Cuenca. Two years later, she won the first documented bicycle race

²³ Moreno Guillén, Francisco. 1996. *Sintesis Historica del Ciclismo en el Azuay*.

from Cuenca to nearby Biblián. Chica easily beat out the other female competitors in that all-women's race and won both another medal and the adoration of her town. But the reign of female riders stopped there until decades later when women entered the downhill mountain biking scene.

The majority of Cuenca's recorded cycling history focuses on competitive cycling and bike touring trips, similar to Europe's early bicycling history. Young men competed to see who could ride the fastest or the longest. They would hold long races that wound their way through the countryside into nearby towns. Some young men eschewed organized racing and took off on adventures atop bicycles. Moreno Guillén himself recounted his own adventure in the 1940s, traveling all the way from Cuenca, Ecuador to Bogotá, Colombia, a distance of nearly 1,500 kilometers over four months. This was one of the first instances of the bicycle as a tool for Cuenca to garner international recognition. Along the way, he and his partner stopped and stayed in the towns, sometimes giving interviews to local newspapers and receiving medals in recognition of their athletic prowess. Once they reached Bogotá, the two men were showered with adoration from the Colombians, and Cuenca was thrust into the limelight. It was unlike early European bike tours in that they were riding for athletic prowess and international recognition rather than as advertising on behalf of a manufacturer.

The rest of Cuenca's and Ecuador's early attempts to garner regional and international attention were via competitive cycling. In terms of regional status, Cuenca and the entire Azuay province have been relatively successful in races. In August of 1938, Alfonso Rivera Novillo was selected to compete in *1 Juegos Deportivos Bolivarianos*. ²⁴ To the dismay of Azuay, he failed to finish after suffering a bad fall from a botched orange hand-up from a spectator. ²⁵ After World War II was over, bicycles from Europe were imported to Cuenca in droves. In 1952 Mario Polo Eljuri was given Cuenca's second chance at international cycling fame when he was selected to race in *Vuelta Ciclista a México*, but the team apparently lacked the funds to send him there. The first inter-school races in Cuenca came in 1953, and during the inter-province ride from Salinas to Guayaquil of that year, a physician barred Polo Eljuri from entering due to a medical condition. ²⁶ (During our interview, Polo Eljuri vehemently denied there was anything wrong with him, and he claimed it was overt corruption—by this time, he had established his dominance in the sport). Races like these to nearby towns or provinces provoked inter-provincial rivalries, and the reputations of towns were on the line during each race.

²⁴ Moreno Guillén, Francisco. 1996. Sintesis Historica del Ciclismo en el Azuay.

²⁵ A hand-up is when a spectator hands something to a competitor during a race.

²⁶ Ibid.

Then Polo Eljuri won the qualifying race to be the Ecuadorian representative for the Campeonato Sudamericano de Ciclismo in Buenos Aires in 1954. When it came time for the Ecuadorian overseeing committee to send off the best representative, however, they chose racers from Guayaquil and Quito despite Polo Eljuri winning the qualifying race. In Polo Eljuri's eyes, this was intentional corruption. He claimed that the teams from Quito and Guayaquil paid off the overseeing committee to send their racers in his place. That same year, El Comité de Ciclismo y Motociclismo del Azuay imported 24 high-quality Automoto bicycles and six motorcycles to improve race quality and monitoring. Later, Polo Eljuri finished second in a qualifying race for the 6 Campeonato Sudamericano de Ciclismo in Caracas, Venezuela, enough to normally win a trip to the race. This time around, an apparent lack of government financial support left him in Ecuador while other racers from Quito went. Cuenca and the rest of the Azuay province had a hard time gaining international fame due to apparent corruption. They repeatedly performed well during the races, but the teams from Quito and Guayaquil supposedly wanted that reputation for themselves. In an increasingly globalizing world, Ecuador was eager to send off representatives to Colombia, Bolivia, and Venezuela to situate itself as a burgeoning force to be respected, but corrupt officials gave these chances to perhaps lesser candidates. Regardless of the claimed corruption, these stories illustrate how the bicycle has been historically used in Cuenca in an attempt to build their city's reputation on the international, national, and regional scale.

Contemporary City-Wide Infrastructure Efforts

Around five years ago, Mauel Larriva, Margarita Arias, and six others started a bicycle activist group named Biciñan. During the mayoral campaigns, they lobbied candidate Paúl Grande to support active transportation should he get elected. He ended up winning the race, and he started the active transportation department of EMOV (*La Empresa Pública Municipal de Movilidad de Cuenca*). He appointed Larriva to head the branch, and they were given a budget of \$500,000 the first year.²⁷ Larriva hired a couple of young administrative assistants and got to work.

Local government in Cuenca is perceived in two ways. On one hand, people believe that bureaucracy slows progress to molasses and that bribes are needed at every corner. On the other, people see swift decision-making free of unwieldy committee-based processes. EMOV's active transportation division is largely a feature of the latter. Within three short years, 27 kilometers of separated bike paths were designated, the city's first three kilometers of cycle tracks were installed, a

²⁷ Though Ecuador uses the US dollar, the spending power of one dollar is great than in the US.

cutting-edge bicycle traffic light was switched on, and a weekly ciclovía event now blocks traffic on a main scenic boulevard to promote active lifestyles.^{28, 29} Larriva and his few peers have been behind the bulk of these flashy and eye-catching infrastructure upgrades.

Within private entities in Cuenca, there is also an explicit, contemporary effort to use the bicycle to boost the status of the city. Cuenca Ciudad Universitaría (CCU) was started by Jaime Astudillo Romero in a move to improve Cuenca's status and bring young professionals into town to form a hub of knowledge and education. His first project is to promote cycling. The choice to prioritize bicycles shows that they are important tools for reputation-building. His two goals are to "Improve the quality of life in harmony with nature" and to "Develop Cuenca into a city of knowledge." In the context of these two overarching goals, Astudillo Romero and the rest of the CCU believes the bicycle to be a tool to develop the city in an environmentally friendly way and to attract young, educated people to learn more and contribute to the local economy. In detailed plans, the development of new cycle paths and public cycling events fall under a "healthy cities" header, but in interviews with Astudillo Romero, he acknowledged that supporting bicycles was symbolic of many more progressive ideals like equality between social classes and genders, not to mention economic growth.³⁰

Jaime López Novillo is a local lawyer, commuter, and activist that has fully embraced bicycles nearly as a panacea. His primary motivation for riding and proselytizing is rooted in reduced carbon footprints. He runs a local radio show and regularly meets with regional and national decision makers like President Correa and his colleagues at a South American bicycle conference. Like Astudillo Romero, he has grand plans for Cuenca. López Novillo wants his city to be internationally recognized for their support of bicycles.³¹ He regularly hosts group rides, and he wants to start a handful of new business operations surrounding bicycles, including a bicycle library and an educational program.

Jaime López Novillo may be one of the strongest driving forces in defining the meanings of the bicycle in Cuenca. His social media presence is large, and he has been leading at least one group ride a week for years and years—longer than anyone else. Because his reasons for riding are reduced to minimizing carbon footprints, my figure below is not shocking.

²⁸ Velasco, Alexandra, and José Ramón Castellar. 2012. "Estudio para la elaboración del plan de ciclovías urbanas y proyecto definitivo para fase piloto y del estudio para el sistema de transporte público en bicicleta de la ciudad de cuenca". Cuenca: Movére.

²⁹ Manuel Larriva, personal communication.

³⁰ Jaime Astudillo Romero, personal communication.

³¹ Jaime López Novillo, personal communication.

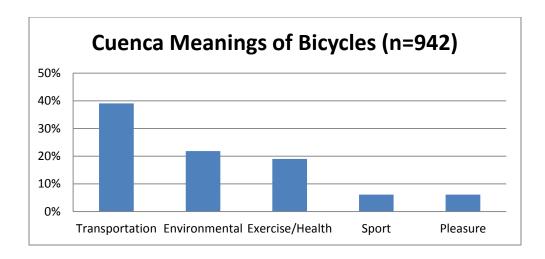


Figure 3: Cuenca meanings of the bicycle

Compared to the nine percent of Portlanders who ascribe environmental meaning to bicycles, this difference is telling. Programs in Portland like SmartTrips designed to increase ridership constantly play up the individual benefits and ignore societal ones like reduced environmental impact. But these messaging tactics are changing in Cuenca. They are moving more toward economic and health-based campaigns to increase ridership.

Astudillo Romero and López Novillo are using the bicycle, among a variety of other tactics, to cast Cuenca as a progressive city home to creativity and environmental friendliness. Tourist brochures typically tout Cuenca as a historical, colonial town, but CCU is working to change that image. Instead of having a reputation as a stagnant, colonial town full of cultural heritage and bucolic quirks, these two activists want to embrace a changing era of education and technology, and the bicycle is part of that master plan. They want to distance themselves from the traditional, conservative values that run deep through the city and promote equality between classes and genders.

From Valentine's Day Serranos to Alexandra Serrano

Indeed, the bicycle has a history with classism and sexism in Cuenca. Although Zoila Eljuri Chica was awarded medals for her riding prowess, decades passed before women and bicycles made any other significant steps toward equality via the bicycle. During the heyday of riding in the mid-50s and early 60s, women did not typically ride. Bicycles were predominantly the territory of men, and women generally walked.³²

³² Galo Ordoñoz, personal communication.

It is now common to participate in the *serrano* every Valentine's Day eve. All of the high-school and college aged young boys and men gather together in large groups as night falls. They grab an acoustic guitar, stop by the liquor store, and head off toward their crush's house. The boys jump out of the car onto the sidewalk (or over the spiky fences if they have had enough to drink) and sing a ballad for their crush. After playing one song, their crush might turn on her light. Another song more and maybe she opens her window to listen. Depending on the situation, she might even come down to the front door and accept a bouquet of flowers. This modern-day practice is a new take on an age-old tradition.

Sixty years ago it was common practice for a young man to ride all the way across town on a bicycle, even up into the neighboring hillsides, just to serenade a girl. Arguably due to social pressure and improving economic conditions, young men drive instead of ride these days. While conducting a survey in the town center, an older woman and I spoke about this phenomenon. She told me, "Mi marido me conquistó por bici hace sesenta años." It was common back in the day for men to head out and conquer woman atop a bike. Men were expected to pursue women, and the bicycle was the perfect vehicle for the job. An added bonus was the fact that it took a lot of effort to ride to a woman's house, and they were supposedly impressed with the lengths to which men would go.

These conservative gender roles are still common today, but they are slowly changing. Just thirty years ago, it was commonplace for boys riding bicycles to help carry girls' typewriters to school. The traditional conservative values and social roles were well defined in primary school aged children. They were certainly present in the adults of the time. I heard one story in particular about a dance teacher who taught at a well-respected conservatory of the day. She had many friends and was an excellent performer and teacher, but she rode a bike and sometimes went barefooted. This was not acceptable to many of her peers or elders. Many people in Cuenca still believed some of the preposterous medical diagnoses that were popular propaganda in the 1890s. They believed that riding a bicycle could negatively affect women's reproductive health and led to epilepsy, tuberculosis, and gout. Some doctors even feared that women would have orgasms and lose their virginity while riding. Some doctors was degraded. None of her friends would associate with her while she was on her bike. Nobody would

^{33 &}quot;My husband won me over on his bike sixty years ago"

³⁴ Margarita Arias, personal communication.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Herlihy, David V. 2004. *Bicycle: The History*. New Haven: Yale University Press.

stop to say hello, and in a small town where it can take ten minutes to walk a couple city blocks because of all of the acquaintances you are socially obligated to greet, that is serious.

But not all stories about bicycles and Cuencana women revolve around oppression. While thirty years ago when boys would carry typewriters on bicycles and dance teachers were ostracized for riding, one high school principal was famous for encouraging his entire school body to bike to campus. He was a commuter himself, and all of his students, regardless of their gender, were particularly receptive to his encouragements. This story is a relatively isolated example, though. Today, bicycles lend themselves to gender equality much more easily, especially with younger people. Margarita Arias herself provides an excellent example. She has two children, and they both grew up competing in cyclocross races in town, but she never considered riding herself. One day, one of her fitness instructor encouraged her to try riding a non-stationary bike. After trying it out, she was hooked. She became a regular commuter, though she had to deal with some of the same stereotypes and social aversion in the beginning. Now she has won multiple Mamicross events (Mothers don their children's clothing and helmets and race their kids' bikes against other mothers), and she has participated in mountain bike rides around the expansive Volcan Cotopaxi. Arias is not alone in her success as an urban commuter and racer. Ana Isabel Idrovo owns a local bike shop. She transitioned into business management after a successful career as a downhill mountain biker, and she sponsors other female downhill riders. Alexandra Serrano is one of Idrovo's shop riders, and she is one of the top downhill riders in the country. Serrano now runs clinics specifically aimed at helping young women master riding techniques. These two women are embracing the bicycle not only as a tool to break down gender barriers, but as a method of economic growth. Their entrepreneurial spirit encapsulates the creative class economy that Astudillo Romero and López Novillo support. Overall, there is a "distinct and substantial change within the riding patterns of (young) women in the last three years."38

Astudillo Romero hosts an event every Earth Day, called *Pedaleando Cuenca*. Last year there were more than 10,000 riders, and there were roughly the same number of female and male riders. In 2013, it was hosted on a weekday, and the majority of participants were school aged children. This could be partially attributed to the age demographic of the ride, but it is indicative of the bicycle's power to bring people together.

Portland

³⁸ Margarita Arias, personal communication.

From Meteorologists to Litigators: Bicycle Advocacy in Portland

Portland's bike history largely reflects worldwide trends as well. By the 1890s, the safety bicycle had been imported from Europe, and American manufacturers had begun producing for massively increasing demand. Oregon governor Theodore Thurston Geer may have been one of the first local bicycle advocate when the safety bicycle came over from Europe during this period. In 1898, he purchased his first bicycle, and he was a regular commuter by his inauguration in 1899. He was a proponent of the Good Roads Movement borne out of Albert A. Pope's reign as a bicycle magnate on the East Coast.

One of Geer's contemporary advocates was meteorologist Bemer S. Pague. Pague moved to Portland in 1888 to take a meteorology job. He quickly became an avid cyclist and banded together with other riders and drew from various cycling clubs to form the United Wheeling Association (UWA) in 1897. That same year, he rallied over 800 donors to fund a citizen-built bicycle path from Portland to Vancouver.³⁹ Some accounts indicate over 6000 users for the one path. This route became known as the Cherry Grove path:

"[S]ome enterprising ladies have recently fitted into a veritable fairy bower, surrounding the grove with canvas, and will serve to all who hunger and thirst dainty sandwiches, ice cream, and fresh milk form the dairy, of which the grove is a part. They have named this delightful wheeling resort Cherry Grove, and that this certainly means much to all wheelmen goes without saying." 40

Pague's crowdfunded public works project and these ladies' refreshment station were prescient examples of the innovative and entrepreneurial spirit surrounding Portland bicycle community to come. During this time, Pague would ride down to Salem to lobby Geer, who signed the 1901 "Bicycle Path Bill" that would authorize counties to "build, repair, and maintain paths on either or both sides of all public highways... for the use of pedestrians and bicycles." The bill also gave the counties the ability to levy a \$1 tax upon bicycles. Tax records in 1899 indicate that roughly ten percent of Portland's 100,000 residents owned bicycles.

³⁹ "Bemer Pague; a Defender of 'Cycle Paths' over a Century Ago | BikePortland.org." http://bikeportland.org/2009/02/25/bemer-weather-prophet-pague-an-early-oregon-defender-of-cycle-paths-15157.

⁴⁰ Ibid.

⁴¹ "Bicycle License Tax, Separated Bikeways in Oregon's 1901 'Bicycle Path Bill' | BikePortland.org." 2014. http://bikeportland.org/2012/08/28/bicycle-license-tax-separated-bikeways-in-oregons-1901-bicycle-path-bill-76647.

The Golden Age of Cycling dwindled shortly after the turn of the 20th century. Bicycles took a back seat to the automobile culture, and they were mostly relegated to children's toys. Coming off of a decade of building tens of thousands of miles of highways under Eisenhower's Federal-Aid Highway act of 1956, some authors and activists started to speak out in opposition to cars. A renewed interest in urban living and environmentalism combined with gas rations in the 70s led to another American boom in cycling. As noted in the introduction, Schumacher's <u>Small is Beautiful</u> and Illich's <u>Energy and Equity</u> along with Jane Jacobs' <u>The Death and Life of Great American Cities</u> touted human-scaled design and transport technology that included bicycles. During the American resurgence of the bicycle in the 60s and 70s, Portland's ridership rose as well.

In 1971, the Oregon state legislature passed HB-1700, or the "Bike Bill." The language of the bill stipulates that of the transportation funding a city receives from state gas taxes, "footpaths and bicycle trails... shall never in any one fiscal year be less than one percent of the total amount of funds." The bill set aside one percent of state gas tax money to fund active transportation infrastructure around Oregon. This was perhaps the first *major* step toward promoting bicycle transportation.

A Shared, Progressive Effort

Portland's bicycle advocacy and local governmental support has a much longer and more convoluted story than Cuenca's nascent community. Portland's bicycle community was borne out of a larger human-scaled livability movement started in the 1970s by stopping (and reversing) some major freeway projects.

Drawn in 1979, Portland's urban growth boundary put Portland on the map as a progressive city in a time when auto-centric, sprawling cities ruled. This new law was symbolic of a new desire to keep growth concentrated in the city center. Lines were drawn around the border of Portland to stop development from sprawling á la Houston or Los Angeles. This signaled a shift in the mindset of Portland's local government. Both professors of urban planning and city officials are starting to realize that "land-use – the places people live, play and work – goes hand in hand with transportation." 43, 44

⁴² "'Bike Bill' and Use of Highway Funds." Oregon.gov.

http://www.oregon.gov/ODOT/HWY/BIKEPED/Pages/bike_bill.aspx.

⁴³ Jon Makler, personal communication.

⁴⁴ Birk, Mia, and Joe Kurmaskie. 2010. *Joyride: Pedaling toward a Healthier Planet*. Portland, Or.: Cadence Press.

After the "Bike Bill" in 1971, active transportation won another victory in the stoppage of the proposed Mt. Hood Freeway. The mountain provided excellent recreation opportunities, but the route was roundabout and was frequently clogged with congestion, so planners devised the Mt. Hood Freeway. It would level the Clinton neighborhood but provide a direct link to the jewel to the east. But the residents of the Clinton neighborhood would not let that happen. They formed a group named Sensible Transportation Options for People (STOP) and fought against the freeway.

After a long battle supported by both Mayor Neil Goldschmidt and State Representative Earl Blumenauer, they succeeded. The freeway was stopped. Instead, the planners chose to extend the light rail network eastbound and demolish Harbor Drive, the highway that hugged the west side of the Willamette through downtown. Harbor Drive was replaced with Governor Tom McCall Waterfront Park and serves as a local event venue.

Over the course of the 70s and 80s, the local transportation department blatantly ignored the 1971 "Bike Bill," and Rex Burkholder was fed up with it. As a co-founder of the Bicycle Transportation Alliance (BTA), he sued the city in a symbolic test case regarding the construction of the Trail Blazer's Rose Garden Arena⁴⁵. The new construction did not have plans for any bicycling facilities, which was in violation of the policy text passed in 1971. As a daily commuter, Burkholder was sick and tired of this blanket noncompliance. He and 20 other cyclists joined together and founded the BTA, and this was their first major accomplishment. The city lost, and it was forced to install a bike lane. When Mia Birk came to town as the bicycle coordinator, she had the legal precedent on her side and began a decadelong coordinated effort to install nearly 100 miles of bike lanes from 1991-97.

During the start of her job as bicycle coordinator, Birk had Mayor Vera Katz on her side for the most part. Katz was instrumental in building one the nation's most iconic bike pathways, the Eastbank Esplanade. Because of the freeway hugging the east side of the waterfront, developers chose to float a section of the waterfront multi-use trail in the water to avoid any problems with the current development. This followed the popular, "if you build it, they will come" mantra for urban transportation planners. True for automobiles, bicycles, and pedestrians, the data tend to show that if good infrastructure is there, people will use it. Birk also explained that she had the help of Blumenauer who made it clear to her that bicycling was an issue of reputation—"I want us to be the country's most bicycle-friendly city". He charged her with the task of raising Portland into the national limelight.

⁴⁵ Birk, Mia, and Joe Kurmaskie. 2010. Joyride: Pedaling toward a Healthier Planet. Portland, Or.: Cadence Press.

Differences in Attitudes and Motivations

The results of my survey indicated significant differences in both the way that these two cities think about bicycles as well as the motivation behind riding in each location. Portlanders, on the whole, have more varied meanings for the bicycle than Cuencanos, and perhaps this is because bicycling is more popular and more normalized in Portland. Cuencanos think of bicycles mainly as a means of transport, and they attach significant environmental, fitness, and pleasurable connotations with bicycles. This lack of diversity within the attributions of bicycles is instrumental for the decision-makers in Cuenca. It is telling that the media messages of bicycles are more surface-level and less variable than in a mature bicycle community like Portland. These graphs might provide insight into what media campaigns are working. It can also inform people like Larriva or Astudillo Romero about the type of people who identify with bicycling in Portland and how they might try to use those conceptions of bicycles to attract Richard Florida's proposed creative class.

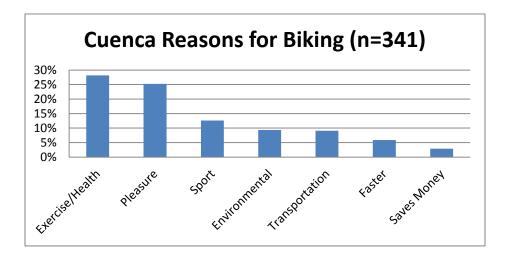


Figure 4: Cuenca reasons to ride

Figure 5 shows the reasons why Portlanders ride bicycles. Compared to Figure 4, the Portland graph shows less of an emphasis on riding for exercise and pleasure and more of an emphasis on utilitarian reasons. In Cuenca, 53% of respondents chose exercise, health, or enjoyment as the main motivations to ride versus 43% in Portland. This is indicative of larger trends in two cities. Cuenca boasts roughly a 1% commuting rate, while Portland hovers just under 7%. Not only does it imply differences in ridership, but it could also be indicative of the different types of media messages that each population receives. In Portland, bicycling might be portrayed as less of a sport than in Cuenca. Indeed, the graphs on the different meanings of the bicycles might be more illustrative of these connections to media.



Figure 5: Portland reasons to ride

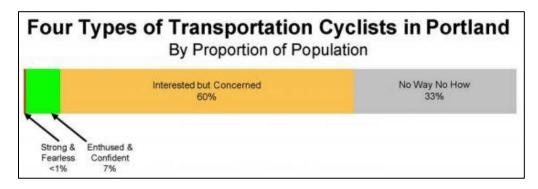


Figure 6: Roger Geller's four types of cyclists in Portland

One of the most significant findings is the corroboration of Roger Geller's analysis in Portland. His study that concluded there are four types of cyclists in Portland. ⁴⁶ The main instrumentality of his survey lies in the "Interested but Concerned" group. They are the ones who might ride every so often, but they might not be full-fledged commuters or weekend warriors. They are usually "fair-weather" riders, and they probably drive a car frequently. Geller and the City of Portland have used this study to show that there is a large market for more investment in bicycle infrastructure, education, and events. They reason that they can start to capture some of this population and turn them on to riding more often.

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⁴⁶ Geller, Roger. "Four Types of Cyclists". Portland Office of Transportation. https://www.portlandoregon.gov/transportation/article/237507.

My data support Geller's typology as well as Jennifer Dill's survey data along the same lines. ⁴⁷ I found that of the Cuencanos surveyed, 59% said that they ride at least occasionally. Only 41% of people said that they did not ride, and many claimed that they would ride if they owned a bicycle. Oftentimes people just did not own one, or it was stolen recently. In Cuenca, only 21% of people said that not owning a bike contributed to them not riding. Not to say that the rest of the 80% of people *do* ride, but that there exists a large group of people who might ride if they had access to a bicycle. Despite criticizing the decisions to build high-ticket bicycle facilities before basic foundations, I do argue that they are part of a larger effort to draw in this "Interested but Concerned" group of citizens. I would also extend these interested but concerned cyclists to *outside* of the city. Though Geller was only speaking about Portland cyclists, Portland has gained a reputation as a bicycle-friendly city. This means that people interested in cycling (or perhaps moving to Portland), might choose to ride or move here because of the great bicycle amenities. ⁴⁸

DISCUSSION

Infrastructure Implications

Portland and Cuenca are currently working on very similar bicycle infrastructure projects. Both cities are set to release public bike share systems soon, both recently installed their first cycle tracks alongside roads, and both cities recently switched on their first bicycle traffic lights. But there is a problem with this picture: the two cities are at very different points in the development of their bicycle community. I argue that this difference in infrastructure *priority* is born out of a difference in *motivation* for building bicycle friendly infrastructure.

Portland started out installing hundreds of miles of bike lanes in the 90s and designating hundreds of miles as neighborhood greenways (formerly bicycle boulevards). ^{49,50} They looked to places like Denmark and The Netherlands for design principles. These northern European countries had been developing comprehensive bicycle infrastructure for longer than the Americas. Though these European countries did sport high-tech projects like public bike share systems and beautiful cycle paths, they also

⁴⁷ Dill, Jennifer. 2008. "Understanding and Measuring Bicycle Behavior: A Focus on Travel Time and Route Choice." http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1027&context=usp_fac.

⁴⁸ Andersen, Michael. 2013. "What Caused Portland's Biking Boom?" BikePortland. http://bikeportland.org/2013/07/02/what-caused-portlands-biking-boom-89491.

⁴⁹ Birk, Mia, and Joe Kurmaskie. 2010. *Joyride: Pedaling toward a Healthier Planet*. Portland, Or.: Cadence Press.

⁵⁰ Andersen, Michael. 2013. "What Caused Portland's Biking Boom?" BikePortland. http://bikeportland.org/2013/07/02/what-caused-portlands-biking-boom-89491.

put tremendous effort into calming traffic, developing bicycle parking, and educating citizens.⁵¹ They did not just install pro-bike infrastructure like bike lanes or cycle paths. Portland has built their bicycle network upon similar principles.

Cuenca, on the other hand, has gone straight for the high-ticket, high-visibility items like a public bike share system and relatively expensive cycle tracks. EMOV, Cuenca's active transportation department, has installed raised cycle paths alongside popular roads and designated some riverside trails, but a large portion of recent funds have gone toward these projects that have concentrated the benefits. All of this is in spite of a study that was conducted by Quito-based consulting company Movére. The study recommended design principles nearly identical to the ones found in Northern Europe:

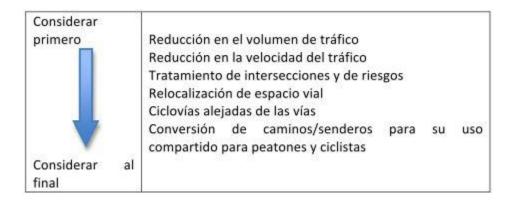


Figure 7: Action recommendations, courtesy of Movére

It reads as a list of actions to take in order of importance:

- 1. Reduce the volume of traffic
- 2. Reduce the speed of traffic
- 3. Intersection treatment of risks
- 4. Relocate road space
- 5. Cycle paths adjacent to roads
- 6. Convert roads or trails to use for pedestrians and cyclists

Instead of following the advice they received from their consultants, EMOV is installing beautiful but short cycle paths. A new park just south of the historic central city features a cycle path that stretches roughly one city block with an admittedly useful bicycle traffic light. However, the connectivity of the path is sub-par. It leads to busy roads on both ends without any bicycle facilities. At the very least, EMOV ought to consider designating some neighborhood greenways on roads with less traffic at slower

⁵¹ "El Uso Masivo de La Bicicleta Para El Buen Vivir." 2012. Embajada del Ecuador en Los Paises Bajas.

speeds. Manuel Larriva, the head of the department, does not disagree, but he has to answer to his director. Plans for lower speed limits for "zonas 30" have been pushed to the wayside despite internal support. Instead, projects like public bike share are moved to the front.

This mindset is something that troubles Portland planners as well. At Portland State University in their Masters of Urban and Regional Planning program, some of the faculty members are grappling with roughly the same problems. Planners and city officials have to balance the *need* of a project with its intended *effects*. Jon Makler is a researcher and professor at PSU, and he is particularly fond of this issue. He argues that too many projects are funded solely based on good design principles. Instead, he thinks that the priority should be to fulfill a demonstrated need first and design second. For example, he argues that Portland cannot afford to add beautiful pathways to an area dense with trails. Instead, those funds ought to be spent in an area devoid of any trails, neighborhood greenways, or bike lanes. He argues that simpler designs that may not include public art or beautiful landscaping are fine in these cases, because they tend to be longer and connect more of the city with less money.

In a similar manner, Cuenca might want to build a foundation of basic bicycle service in place of fancier facilities. The cost to install bike lanes and stencil "sharrows" on the ground is minimal compared to a cycle path. 52

I would argue that a significant motivation for Cuenca to build these high-tech, expensive facilities comes from a desire to be recognized in the national or even international realm. They had the design principles given to them through both the Movére study as well as a national report urging better bicycling facilities, but they were ignored in the place of a bike share system that even some activists do not believe will work. Margarita Arias, in particular, thinks that Cuencanos need basic, safe facilities before anything else. She argues that there is not a lack of accessible bicycles that can be fixed by a bike share system, but a lack of safe places to ride them.

CONCLUSION

I would argue that Portland's reputation for progressive ideals brought the bicycle—STOP was the first instances of Portland progressive nature. But in Cuenca, the desire for this reputation has brought the bicycle. I think this is one of the most salient differences. Bicycling is being used more as an economic or policy tool in Cuenca than when Portland was a nascent bicycle community. Certainly time

⁵² Sharrows are large bicycle symbols below two chevrons painted in the middle of relatively quiet streets that inform all road users that the path is a neighborhood greenway. They are often parallel to major thoroughfares.

and cultural norms play a significant role, but the differences in motivations will frame the bicycle communities for years to come.

Recent research under the umbrella of active transportation and urban planning has realized tremendous steps to understand how many people ride, where they ride, and for what purpose. These are useful, instrumental questions to answer. Engineers and urban planners need those data to decide how wide facilities should be, where to put them, and what style infrastructure to use. But the Mobilities movement spearheaded by John Urry and Mimi Sheller posits that there may be more to gain from studying transportation under alternative viewpoints. Justin Spinney sums up:

"Conceptualisations of movement and mobility within geography are increasingly complicating reductive and sedentarist understandings that have tended to theorise mobility either as meaningless, or as the practical outcome of 'rational' decision makers. Until quite recently there has been a sedentarist bias in cultural geographic enquiry that has resulted in negative readings of mobility as insensate, polluting and harmful. ... [The Mobilities movement argues] for research into cycling to explore the content of the line between A and B in order to highlight the often fleeting and ephemeral meanings that can contribute significantly to what movement means. An essential part of this project is for research to focus on the 'immaterial.'"⁵³

Perhaps the end points of the ride are not the most interesting parts of transportation, and maybe focusing on less tangible elements of the ride(r) can provide interesting advancements toward questions about identity, community development, and symbols. By focusing on the symbolic meanings of the bicycle, I have helped to explain tangible differences in the bicycle communities via the infrastructure decisions, but more research should be done on these "ephemeral meanings."

Though I largely criticized Cuenca for "skipping" some basic infrastructure prerequisites like traffic calming and reducing, there may be room for an argument of non-linear development. Similar to how rural towns adopted cell phones without first laying down landlines, perhaps there is an element of leap frog technology in bicycle infrastructure. On the whole, I think the comparisons are not quite analogous. With phone technology, physical landlines were routed into homes all over cities, and they evolved into cell phone towers that emitted signals across the landscape. I would argue that this is nearly the opposite of bicycle infrastructure technology.

⁵³ Spinney, Justin. 2009. "Cycling the City: Movement, Meaning and Method." *Geography Compass* 3 (2): 817–35. doi:10.1111/j.1749-8198.2008.00211.x.

Most people agree that the Danish model of separated bike paths is the best (notwithstanding John Forester and his cohorts). Instead of having a diffuse network of signage that covers the landscape, urging road users to share the pavement, cycle tracks are costly and require paving paths and buying land-usage rights in all corners of the city. I would argue that it is easier, quicker, and more cost effective to calm traffic, reduce it, and share the already-existing infrastructure in the short term, though separate facilities are ideal. The difference between the leap between cell phone technologies and bicycle infrastructure lies in the time and cost involved. If Cuenca or any other city had the capital to build a great network of trails initially, then I would certainly support that decision (á la Bentonville, Arkansas, funded by Sam Walton). 54 Even Mia Birk in her memoir mentioned that "it is easier to go from bad to great than good to great." But as cities go, capital-intensive projects are few and far between, especially with a country that is just getting over volatile economic times. Not to mention the fact that there are incentives for Cuenca to simply appear to be a bicycle-friendly educational hub. There certainly will be lessons learned that cities like Cuenca can draw from—this is the leapfrogging that can happen within the bicycle community. Portland is continually experimenting with infrastructure design and their SmartTrips program is doing some heavy lifting in figuring out how to convert residents to commute by bicycle. Northern Europe long ago figured out many intersection treatments and advocacy techniques.⁵⁵ Cuenca certainly will not need to go through the same growing pains, but I proposed that certain infrastructure decisions might be largely ignoring some of the growing pains that places like Northern Europe and Portland went through. The new cycletrack on Avenida Loja in Cuenca is a perfect example. It is surely built in a high-need environment—the road serves as a main avenue to the city center from the southwest, but after it was installed, it was abused. Motorcycles had nearly taken over the bike path when faced with congestion. The raised plastic bumps and paint on the ground do not serve to keep motorcycles from jumping over them. This would not be a problem if police were there to enforce this illegal action, but the police themselves abuse the pathway in the same manner. When nearly three quarters of the citizens cite safety as the biggest issue the city faces compared with less than twenty percent saying traffic, there are certain issues that need to be dealt with as prerequisites for cycle paths. 56 The Economist in 2008 noted, "It would be great if you could always jump straight to the high-tech solution, as you can with mobile phones. But with technology, as with education, health

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⁵⁴ Brawner, Steve. "In The Land Of Sam, Bentonville Is Building For Rapid Growth." Talk Business. http://talkbusiness.net/2014/03/land-sam-bentonville-building-rapid-growth/.

⁵⁵ Furness, Zack. 2010. One Less Car. Philadelphia, Pennsylvania: Temple University Press.

⁵⁶ Velasco, Alexandra, and José Ramón Castellar. 2012. "Estudio para la elaboración del plan de ciclovías urbanas y proyecto definitivo para fase piloto y del estudio para el sistema de transporte público en bicicleta de la ciudad de cuenca". Cuenca: Movére.

care and economic development, such short-cuts are rare. Most of the time, to go high-tech, you need to have gone medium-tech first."⁵⁷

There may be moral or sociological issues with cities' quests to attract this certain type of human capital in the creative class as well. For one, the creative class is often wealthier or more highly educated, and by focusing on these people, certain groups or classes are ignored. Aaron Renn critiques Richard Florida's creative class and the New Urbanism movement:

"In short, there's no flow through to people who aren't directly tapped into the knowledge economy itself. I might add that this probably does include a number of service sector workers like celebrity chefs and personal trainers who cater to the luxury end of services. But the majority of residents are missing out. To put it in political speak, the creative class doesn't have much in the way of coattails." 58

Criticism is drawn from neglecting the other socioeconomic classes. What happens to the agricultural workers when Cuenca builds urban cycle tracks instead of province-wide bike lanes? Or what happens with EMOV spends money on bicycle facilities that are exclusive to the 60% of people who ride bicycles, when the pedestrian facilities are highly dangerous as well? These are real concerns, and I argue that bicycling is important and perhaps more egalitarian or accessible than driving, but more basic issues of safety ought to trump mobility when the two are at odds. As I have advocated similarly— high-tech cycle paths may be an important *part* of a transportation policy, just as transportation and mobility ought to be an important part of any cities' development goals.

At the end of it, though, I am reminded of a quote from Manuel Larriva, "What makes the Cuenca bicycle community unique is the people." Regardless of how much we focus on the designs of new infrastructure or get people to ride bikes, it comes down to bringing people together.

Appendix

Portland Survey:

⁵⁷ "The Limits of Leapfrogging." 2008. The Economist, February 7. http://www.economist.com/node/10650775.

⁵⁸ Renn, Aaron. 2013. "Is Urbanism the New Trickle-Down Economics?" Accessed April 7, 2013. http://www.urbanophile.com/2013/02/03/is-urbanism-the-new-trickle-down-economics/.

	Bicycle Survey
	All questions are optional
Age:	
Gender:	
Economic Level:	High Medium Low
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does it have?	
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	Irigues. I am a student at Lewis & Clark College, thesis project. Contact me at
	lark.edu or (760) 487 8808

Figure 8: English Survey

The survey was conducted in February and March of 2014. Survey locations were the PSU farmer's market, Pioneer Square, SE Hawthorne from 35th to 39th, and NE Alberta from 14th-28th. Locations were chosen for geographic distribution and high pedestrian traffic. Locations were scouted on 182nd and 82nd, but there were few areas with high pedestrian traffic on these fast, car-oriented corridors.

All surveys were anonymous and all questions were optional. Younger-looking people (under 18) were not asked to complete the survey, though when their parents were asked, they sometimes gave a copy to their kids.

Ecuador Survey:

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Figure 9: Spanish Survey

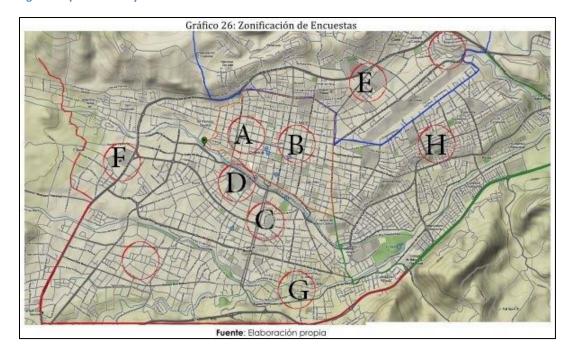


Figure 10: Cuenca survey sites

Surveys were conducted at the above locations, spread over a week-long period. These locations vary from markets to town centers to universities. All are high-traffic pedestrian areas. Base graphic courtesy of Movére.

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