

Pedaling Culture



Thoughts on bicycling in American life
by Mighk Wilson

Contents

Introduction	3
Bicyclists' Value to Society	5
The Spirit of the Two-Wheeled Tribe	8
Building a Bicycling Culture	11
Building a Bicycle Culture (Part II) – By Riding More	13
“Whaddaya Mean, ‘Share the Road’?”	15
The World Comes Knocking	17
Change Will Come	19
Want to Make Cycling Safer?	21
Expect a New Reality	23
Trust Your Inner Monkey	25
Learning to Share	27
Traffic Justice	29
Freedom from Fear	31
Bicyclists, Motorists and the Language of Marginalization: Racism, Sexism and Mode-ism	43
The System in the Faraway Land: A Parable	56

Introduction

My job for the past fourteen years has been as bicycle and pedestrian coordinator for Metroplan Orlando, the metropolitan planning organization for the Orlando Urban Area. I have also served as board president of Florida Bicycle Association for the past two years. These two roles, combined with my background as a lifelong cyclist, have provided me with plenty of material with which to explore how our culture perceives bicycling and bicyclists. The shorter pieces in this compilation are from my President's Column for FBA's quarterly publication, *The Messenger*. A deadline is always an effective inspiration for creativity. The two longer pieces simply grew out of questions that I thought (at least at the time I wrote them) were key to why cycling holds the degraded place it does in our culture.

I occasionally get e-mails from people who've read my writings and make various assumptions about me, so here's a brief *cyclo vita* which I hope will dispel the common ones.

I was born in 1960 in Cleveland, Ohio, and learned how to ride a two-wheeler sans-training-wheels at age six. I've been using a bicycle to go to work since I was ten (when I got my first paper route). I consider the bicycle to be my primary mode of transportation. I rode my first century at age fourteen. I took my first multi-day tour at age seventeen; self-supported, with a friend, 600 miles from Cleveland to Toronto and back. Like most Americans, I got a motor vehicle operator's license when I was sixteen. I got my first car when I was 21, and have owned a car ever since, except for the period of May through October of 1987, when I sold my car and took a four-month-long, self-supported bicycle tour of the U.S. That tour ran 7,000 miles from Kissimmee, Florida to Portland, Maine to the Oregon Coast to Oakland, California. I estimate I have at least 160,000 miles of cycling experience; most of it urban/suburban. The first time I rode on a designated bike lane was some time in the early 1990s. I've biked in 34 of the 50 states. As for big-city riding, I've biked in Cleveland, Toronto, New York, Boston, San Francisco, San Jose, Philadelphia, Portland, Miami, Minneapolis, and Chicago. I've also biked in many of the American "cycling nirvanas:" Davis, CA; Moab, UT; Portland, OR; Corvallis, OR; and Madison, WI. I have lived in Orlando since 1984, except for a period around the cross-country tour in 1987. I am comfortable cycling on virtually any road, from quiet neighborhood streets to congested multi-lane urban arterials to narrow, two-lane suburban collectors. (But just because I am comfortable cycling on such roads doesn't mean it's always enjoyable.) I owned and rode a recumbent from 1983 through 1995. I did a little unregistered racing in the early 1990s. I've been a mountain biker since 1988. I ride tandem with my wife Carol (whom I met on a cycling social ride). We were instrumental in forming and growing FBA in its earliest years. I've lost two cycling friends to careless motorists. I lost a brother to a head injury

(though it was on an ATV, not a bicycle). I've put my own helmet to use once, demonstrating how to do a wheelie (OK, how **not** to do a wheelie) at a mountain bike festival. My wife was assaulted by a motorist who believed she shouldn't be on the road. I've been hit by a car once (from behind), but it was such a minor bump that I didn't leave the roadway, or even my saddle, and I wasn't injured. The guy was probably on drugs. It was a hit-and-run.

December 8, 2007

Bicyclists' Value to Society

Every healthy community exhibits a good measure of altruism as well as positive reinforcement for such beneficial behavior. Communities that do not are fractious, unpleasant and eventually doomed to violence and despair.

When they drive a bicycle (even when improperly) people impart valuable resources and acts to the community and should be rewarded. These benefits also are provided by walkers and, to an extent, transit users. They may be tangible, intangible, intended or unintended.

Tangible Benefits

Cyclists provide their communities with numerous tangible benefits. Many of Florida's cities are struggling to maintain air quality. Each bicycle trip made in lieu of a motor vehicle trip keeps a certain amount of lung-damaging, volatile organic compounds and nitrous oxides from entering the atmosphere.

Automobile use also contributes to the majority of the toxins and nutrients that pollute our waters.

It is estimated that each new motor vehicle brought into an urban area will require seven new parking spaces. These seven spaces add up to about 1,680 square feet.

If an urban area receives 100 new cars per week (as many Florida cities do) its parking requirements would cover an additional one-third of a square mile each year. Automobiles require at least three times as much area as their owners. In areas where auto parking is scarce, as in many central business districts, a person who arrives by bicycle frees up valuable space for another.

Even though our health care system is basically market-driven, healthy people still subsidize unhealthy people to some degree. Bicyclists are healthier than average and help to lower health care costs for the population at large. (While bicycling-related injuries and fatalities are negatives in this regard, the overall health benefits of cycling outweigh this disadvantage according to the British Medical Journal.)

Obesity has become a major health concern in the U.S., and exercise such as cycling is an ideal treatment.

A major component of this nation's foreign debt is due to our tremendous use of Middle Eastern oil, used predominantly for gasoline. Our effort to protect our access to this fuel source has cost us billions in military expenditures.

Cleaner air and water, easier parking, less paving of fragile land, lower health care costs, a better balance of trade, less money spent on military

excursions—all are of significant, measurable value. These impacts can be reduced by use of bicycles for transportation or fitness.

The Intangibles

Intangible benefits of bicycling cannot be measured, but can be just as valuable. Bicyclists have better connections with their surroundings and see more of what is happening in a neighborhood (hundreds of law enforcement agencies use bicycles as an integral policing tool).

Cyclists are more likely to have chance encounters that enrich their life and the life of others. Positive spontaneous encounters are threads in a fabric; the more they weave together, the stronger and more interesting the cloth.

Chance encounters among motorists are normally unpleasant and often involve exchanges of license numbers and insurance accounts and trips to repair shops and hospitals.

Returning Value

Whether a person bikes to make the world better or merely to serve personal needs is irrelevant when considering the validity of rewarding the act.

In Central Florida we value tourists for the money and jobs they bring to our economy. We strive to make them feel wanted, liked, happy and comfortable. Tourists bring value to our community and we give them value in return. This has resulted in one of the most successful tourism markets in the world.

There is no reason why this principle couldn't be applied to bicyclists, but more often than not – it's not.

Anyone who's been to Key West knows how many bikes are parked all over Old Town, and that car parking spaces are at a premium. The city's own consultant found that 14 to 20 percent of all trips on the island are by bike. To replace those bike trips with automobile trips would be a social and commercial disaster.

Instead of recognizing this value, Key West's attitude toward bicyclists seems to be that they are nuisances to be controlled. This was the feeling expressed by many local cyclists at a Key West Bike Action workshop.

Cyclists as a group are often withheld support due to actions of those who bike irresponsibly, but this rationale is very weak. People who operate their bikes illegally are a threat mostly to themselves, while motorists who drive carelessly or recklessly pose a serious threat to all.

In spite of the thousands of traffic deaths each year in Florida due to speeding and other dangerous motoring behavior (about 700 are pedestrians and cyclists), the state and most counties reward motorists by widening highways and following the recommendation of the American Association of

State Highway and Transportation Officials to “use as high a design speed [the highest “safe” speed at which the roadway can be used] as practicable.”

Speeding is generally not perceived as a wrong in this society unless it results in a crash. Cyclists who behave no less irresponsibly are accorded poorer treatment. Motorists are routinely rewarded and encouraged for destructive, unnecessary behavior, while cyclists are often treated as some “special interest.”

The accommodations bicyclists are asking for barely account for one percent of our total surface transportation funding, yet we are told by some that they cost too much.

Too many of our peers, our elected representatives and our government employees think it's perfectly OK to encourage us to drive motor vehicles and to discourage us from driving bicycles.

So what do we do about this problem? If people are to react to something, they must first perceive it. Not enough people perceive the value that cyclists give the community. We must help them to see.

FBA board member Art Ackerman told of a brilliant example he was a part of years ago when he was a member of a motorcycle club. The officials of New York City thought they could get more parking revenue by making each motorcyclist use a single space. The clubs first tried to reason with the city, but when that failed they came up with a brilliant plan.

One workday, nearly every motorcycle club member in the metropolitan area rode into the city early in the morning while parking spaces were still plentiful. Each took and paid for a single parking space. The ensuing parking and traffic chaos convinced city officials that perhaps it would be OK if motorcyclists continued their practice of sharing spaces.

Let's use our strengths and our creativity to show our cities and towns that we count and we contribute and we deserve respect. Clipping this essay and giving it to your local elected representatives could be a start.

The Spirit of the Two-Wheeled Tribe

Homo sapiens are tribal animals.

The essential unit of survival for our species is not the individual, not even the family, but the tribe. Individuals and families cannot survive outside of the context of a larger community. We feel this subconsciously as cyclists, feeling more protected when riding with others than when alone.

Recently my wife, Carol, and I, with the help of Tricia and Bruce Martin, put on a Christmas Light night ride through the First Unitarian Church of Orlando. We invited FBA members in the Orlando area and also got the word out informally. Due to the cold temps, the numbers of people suffering seasonal maladies, and general holiday busyness, our turnout was modest; perhaps 25 riders about evenly divided between church members and FBA members.

I've come to think of it as a meeting of representatives of two tribes. The primary tenet of the Unitarian Universalist Church is that personal experience, conscience and reason should be the final authorities in religion. There are no dogmas to adhere to, only guiding principles. Diversity is key; you will find people from all religious backgrounds: Jews, Buddhists, Pagans, atheists, agnostics and, yes, Christians.

I write this not to sell you on the merits of the "UU" church, but to set the stage for thoughts about how we might see ourselves as cyclists. I've converted a few UU principles to bicycling principles we might adopt:

- Belief in the inherent value of every bicyclist and every bicycle trip
- Justice, equity and compassion among road users
- Acceptance of those who bicycle in ways different from our own and encouragement to improve bicycle use and skills in our communities

In the hall where we met after the ride for snacks and drinks, a "church tribe" member, Nikki, came up to me and gave me a big hug of thanks for putting on the ride. She said she'd bought a new bike just two weeks earlier and that Carol and I and the Christmas Ride were the reason and inspiration.

It was her first ride in many years. A little while later I was talking to a member of the "bicycle tribe." We watched Nikki outside the window preparing to roll her bike back to her car and lighting up a cigarette.

The "bicycle tribe" member commented about her smoking as though it was quite incompatible with bicycling; a comment I very likely would have made myself not long ago. So I explained where Nikki was coming from.

Creating a culture that embraces bicycling is far more about encouraging people to ride on their own terms and getting everyone—especially

motorists—to accept those terms, than about building paths or striping bike lanes.

This is not to say that we should abandon our key principle—that bicyclists fare best when they act and are treated as drivers of vehicles—but that we need to be very patient, and lead new riders from a place where they feel comfortable.

There's no way Nikki would have ever considered riding nine miles, at night, on city streets by herself. But she said the company of two dozen other cyclists made it easy. She had a tribe to support and encourage her.

Ask a group of people about their earliest bicycling experiences and many will use the word "freedom." Our power to grow the "bicycle tribe" and change our culture is weakened when we insist that newcomers adhere to dogma, inhibiting their ability to recapture the freedom they've lost.

"Thou shalt wear a helmet...thou shalt wear neon colors, Lycra and special shoes...thou shalt ride a multi-speed, high-end bike." What better way to turn people away from bicycling?

Instead of blind adherence to dogma, UUs strive to "heed the guidance of reason and the results of science." In the same way the lack of a solid foundation in science education can lead to irrational beliefs about the way the universe works, the lack of training and education on bicycling can lead to irrational beliefs about cycling.

Early YMCA leader and evangelist Sherwood Eddy said, "Faith is reason grown courageous." Fifteen years ago after I'd completed a solo cross-country tour, a Christian friend told me, "What you did took real faith."

The comment confounded me, a non-believer, because I equated faith with belief in the unknowable. But now I understand that the strongest faith is based on reason, the known and the knowable.

While I was fully aware that there are a number of people out there who are quite dangerous, I had faith in my skills and experience, and especially in the basic goodness of others.

This faith in the known extends to everyday cycling. Faith in the fact that cyclists do fare best when they act as drivers of vehicles. Faith that in spite of the inevitable harassment from ignorant and belligerent motorists, the actual risk of cycling with motorized traffic is in fact very small, especially when compared to the risks of leading a sedentary life. And faith that the most basic skills and practices of cycling are adequate to handle most situations.

Which direction will our tribe take? Will the spirit of bicycling in Florida continue to be controlled by a car culture's taboo that says bicycling is dangerous, frivolous, a mode only for the disadvantaged or the athletic,

requiring separate facilities? And will our tribe stifle its own growth with dogma that insists on athleticism and special equipment?

Or will a new spirit of bicycling be formed, based on freedom, equality, science and reason? A spirit made courageous through community connections and faith in the known.

Building a Bicycling Culture

In my last column I touched on the idea of building a “bicycle culture.” I believe this is one of the most important things we can do to advance the interests of bicyclists. What do I mean by a “bicycle culture”? A community in which bicycling is perceived as normal, where bicycles are used for a wide variety of purposes and by a wide variety of people. This sense of normalcy is critical. It’s the only thing that will negate the sense that cycling is dangerous, only for children, the poor and the athletic.

We can have fun building this bicycle culture. Indeed, having fun is probably the best way in which to do it. But the fun needs to be targeted. At our recent FBA Off-Road Powwow, Suwannee Bicycle Association leader Rudy Miller noted how their program to train ride guides resulted in a number of people getting together learn new skills, but they also had a great time and inadvertently created a “social network.” Ultimately it’s this social network that strengthens the organization, develops its leaders, and helps it engage still more people.

Many cycling advocates focus on the “build it and they will come” philosophy. They believe countries like The Netherlands have strong bicycle cultures because they built extensive bicycle facilities. Actually The Netherlands built extensive bicycle facilities because they had a strong bicycle culture; about fifteen percent of its people biked regularly for transportation before they built their bikeways.

Floridian cyclists seem to have a tough time sustaining and growing local on-road bicycle advocacy organizations. These nascent groups normally focus on getting people to meetings and addressing how the government ignores the needs of cyclists. Burn-out is an all-too-common outcome. People have to come first, not issues. Yes, the oft-repeated Margaret Mead quote is true – *“Never doubt that a small, group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.”* – but an all-important question is **How** did they change the world? I’d be willing to wager that most of those small groups change the world by becoming bigger groups, not by convincing a few elected officials or bureaucrats to change the way they do business. An excellent resource on how people can be effective working for change is the book *Soul of a Citizen: Living With Conviction in a Cynical Time*, by Paul Rogat Loeb.

It can be simple or sophisticated; anything you can do to bring people together is positive. Organize a neighborhood ride. Hold an “art bike parade.” Hold a “parking lot reclamation action” by covering a few parking spaces with AstroTurf and making a temporary mini-park. Whether you agree with the concept or not, the Critical Mass movement does an excellent job of building bicycle culture.

We can struggle against the status quo to build some utopian future of bike lanes and paved paths tomorrow, or have fun today making friends, improving skills and showing our communities that bicycling matters.

Building a Bicycle Culture (Part II) – By Riding More

In my Spring column I discussed the idea of building a bicycle culture, and gave some suggestions on ways individual cyclists can help in that building. I wrote: *I believe this is one of the most important things we can do to advance the interests of bicyclists. What do I mean by a “bicycle culture”? A community in which bicycling is perceived as normal, where bicycles are used for a wide variety of purposes and by a wide variety of people. This sense of normalcy is critical.* But while I wrote about “normalcy,” I also made suggestions for activities that were quite outside the realm of ordinary behavior. Consider this piece a realistic remedy to that.

Bicycle culture does exist throughout Florida, but it’s very limited, and it may be that we are the ones who’ve limited it. If we want to invite people to join this culture we need good ambassadors. Usually when I hear people talk about “being a good ambassador for cycling” it involves obeying the rules of the road. Certainly there’s nothing wrong with promoting good behavior, but it does virtually nothing to grow bicycling.

To be a really good – and *effective* – ambassador, people must perceive you as someone they can relate to. When you’re cycling down the road on your sleek, new road bike, wearing Lycra and a wildly colorful jersey, non-cyclists perceive you as The Other: weird, athletic, a thrill-seeker. What’s more, your interactions with non-cyclists are mostly fleeting and impersonal. Sure, you’re obeying the law, but what do they care? You’re still a freak.

But when you use your bike for functional trips you create a wider, stronger, more personal impact. When you show up at the grocery store check-out with your helmet in the basket and your panniers in hand, you become a real person who uses a bike to make his or her life better. You’re doing a normal thing, though perhaps in a slightly unusual way. But because you’re right there -- face to face with the cashier, the bagger, your fellow shoppers – you’re still a normal person.

I’ve talked to a number of cyclists who don’t use their bikes for anything but recreational purposes. Oh sure, they’ve thought about using their bikes for practical trips, but their bikes aren’t set up for such use. It’s like having a Formula One racer as your only car. Sure, it’s fast and cool and exciting, but where do you put the groceries?

For many of you, getting a new bike should be the first task toward helping build a bicycle culture in this new year. No, it doesn’t have to be a *new* bike, just new to your garage. It can be a cheap one (not a department store bike, but not a high-performance rig either), or perhaps you have an old bike gathering dust. It needs a rack and a set of panniers, fenders, lights, tires suitable for around-town cycling, a saddle you can ride without

padded shorts, and pedals that can accommodate regular shoes. A trailer will greatly expand your options. Another great set-up is the XtraCycle (see www.xtracycle.com).

Now that you've got a practical bike, each time you need to go somewhere you should ask yourself: "Can I do it by bike?" Before, when all you had was an open-road racer the answer was mostly "No." Now your main excuse is gone.

The Bonus? You get to ride more.

“Whaddaya Mean, ‘Share the Road’?”

We throw the “Share the Road” mantra around frequently here at FBA. Every so often we get a request to fund “Share the Road” signs along someone’s preferred cycling route, or we hear from a group trying to get their local government to do so. Most of us agree that “STR” means bicyclists have the right to use as much of the road as is necessary for our safety, but do we really understand how the term is interpreted by non-bicycling motorists? We shouldn’t assume to know. In a recent e-mail list discussion among bicycle coordinators a few wondered if some motorists thought “Share the Road” means bicyclists should keep as far right as possible so they can pass easier.

Even if every motorist understands what we mean, some will disagree because they don’t know the law. Many coordinators prefer signage saying “Bicyclists May Use Full Lane” or some variation of that, and one suggested “Change Lanes to Pass Bicyclists.” But then there are those who really don’t care what the law says, who will harass and threaten us regardless because the chance of punishment is low. Will a sign change the mind of a motorist who regards bicyclists as strange people who wear odd clothes, act childishly and hinder their progress? You can’t defeat a taboo with simple signs and slogans; it takes deeper social change.

Most motorists don’t want to hit or scare or threaten bicyclists, and they don’t need the government to tell them how to behave. But there is that small percentage who don’t care what the signs or the laws say. I don’t believe there are many who fall between these two camps. It’s the members of that smaller group that make our cycling experiences unpleasant or even dangerous at times. If we can reach them and change their attitudes, we’ll solve one of today’s main problems for cyclists. The big question remains: Who are these people and how can we change their attitudes?

It’s too easy for us to say, “Oh, it’s those jokers in the big pickups with the Dale Earnhart stickers on the windows,” or “That town is full of people who hate bicyclists.” And perhaps the solution is not to try to reach or even identify the thugs. The Suwannee Bicycle Association has been holding its Secret Santa Ride in White Springs for many years. SBA sponsors a special holiday puppet show and party for the town’s children, they encourage ride participants to bring presents to distribute to the kids, and they run a cycling Christmas Parade through the center of town. Such outreach cannot guarantee the elimination of cyclist harassment, but it must have some benefit.

It's always nice to be nice, but sometimes you also have to take a stand. Rosa Parks was a nice person, but she knew that wasn't enough, and eventually decided sharing the bus meant sharing all of it, not just the part others said she could use.

The World Comes Knocking

On the TV news I see a story about an oil pipeline blown up by Iraqi rebels. Two weeks later I watch a news helicopter shot of a long line of motorists waiting to get gas. It stretches down the road for a hundred yards. Next comes a shot of a gasoline tanker being escorted by police. I think of these scenes as previews of our future. Of course, the two latter scenes have no real relationship to the first one; they are the result of Hurricane Frances.

The past few weeks have brought home to me the reality of how the global affects the personal. Charley brought Carol and me not only anxiety and a mess to clean up (but no real damage, thankfully), but also a Category IV head cold and respiratory infection for me which lingered all the way through Frances. This triple whammy pulled the plug on my plans for a five-day bike tour and attendance at the Thunderhead Alliance Retreat and the ProBike Conference in Victoria, British Columbia. For the past few weeks, the effects of global forces on our home took precedence over bicycling.

The aftermath also brought home, in a unique way, how our community still thinks of cycling and walking as minor concerns. Bike lanes and sidewalks became convenient places to store storm debris. I wondered how motorists would treat me when I biked after the storm. They were exceptionally courteous for the first few days after September 11. Not so after Charley.

Implicit in the bigger "Why" of getting hit by two hurricanes in three weeks (and Ivan's threatening as I write this) is the question, "Can we blame this on global warming?" Who knows? More and stronger hurricanes; more and stronger viruses...

Veteran Texas oilman T. Boone Pickens recently said on NPR, "The world is producing 82 million barrels of oil a day. I think that's all we'll ever have. So you have a supply situation that isn't getting any better and a demand situation that is going up ... I think [we're] peaking now." Pickens is as traditional a capitalist as you can find, not some "goofy tree hugger." He also told Fortune Magazine, "I know one thing: I don't think we'll have to worry about global warming after 2100. We're going to have to transition out of hydrocarbons pretty quickly within the next 20 to 30 years. You won't [run] out of them, but transition into something else."

In spite of record gas consumption and shortages, there are no new refineries planned in the U.S. Why? Partly because environmental regulations help make them multi-billion dollar investments, but also, why invest billions on a 50-year lifespan facility when the resource it uses is

diminishing in supply? Discoveries of new oilfields peaked in the 1960s and no major new fields have been found since the late 70s.

China's economy is growing at 9% a year and their car buying is growing exponentially; India is not far behind. Global oil consumption is increasing at nearly 3% a year, but global oil production is likely at its peak. As with any commodity, if supply stays flat or drops while demand increases, prices go up. And up.

Energy analysts speak of "energy return on energy invested," or EROEI. Oil today gives a very high return on energy investment. That's why we don't shift to alternatives and why we can waste it so flagrantly. After you've pulled half the oil out of an oilfield, it gets progressively harder to extract the remainder. Eventually it will take more energy to get the last barrels of oil out of the ground than the oil itself produces. Oil will become more and more expensive, and then it will cease to be economically viable as an energy source.

Every thing we buy to fill the needs and desires of our lives -- food, clothes, furniture, what-have-you -- comes to us in some part by oil. The cost of most everything will rise with the price of oil. In such an economic climate, SUVs will lose value and the new hybrid cars will gain value. But who will be able to afford taking a \$2,000 hit when selling the old gas hog, then also paying an extra two to three grand for a hybrid? A bicycle provides a far better return on investment. At only \$2.00 a gallon, you could "pay off" a \$500 bike in about 5,000 miles.

Perhaps it won't happen in the next few years. Maybe the "voices of reason" are right and we've got a decade or so to go. But it is inevitable. With that inevitability, bicycling will become much more important to our culture; from nuisance or toy to necessity.

The individuals, families, cities, states and nations that invest in cycling the soonest will be the ones best positioned for the future.

Change Will Come

Watching a PBS documentary last night about China reminded me of the reality of our challenge in making bicycling an important part of our culture. When George Bush Sr. visited Beijing over 15 years ago, he was struck and impressed by the hordes of people getting around on bikes. Major changes were made to US transportation policy in 1993, including a significant increase in funding and planning for bicycling. Some credit is probably due to the impact of Bush's China trip. Today, bicycling is dropping dramatically in China as more and more Chinese are able to afford cars, and those cars are increasingly crowding cyclists off the roads through physical intimidation and abominable air pollution.

There's a common misconception that places like Denmark and The Netherlands have lots of cycling because they have so many bicycling facilities. History shows otherwise. Cycling grew immensely in The Netherlands during the first half of the 20th Century, and did so with virtually no special facilities, but it started dropping precipitously during the fifties and sixties as an improving economy and government encouragement made motoring easier and popular. Dutch cycling peaked in the late forties, with most major cities seeing 60 to 90 percent mode shares. Like many countries, the Dutch embarked on a program of building highways and parking lots after World War II. Early bikeway projects were promoted not as ways to increase cycling, but to get cyclists out of the way of motorists. By the early seventies, cycling mode shares dropped to the 10 to 30 percent range. The millions spent on Dutch bicycle facilities during the seventies, eighties and nineties managed only a modest reversal, bringing four of their nine largest cities up from 30 percent to 40 percent. The other five cities increased from about 10 percent to the 15 to 20 percent range. (By the way, Dutch auto use still increased at a faster rate than bicycling did during the last 30 years.)

Those of us who wish to see wholesale change must temper our expectations. Economic factors are what really determine how many people use bikes. College towns often have high cycling rates because college students tend to have lower incomes and colleges don't want to waste dollars providing more parking spaces. The city of Davis, California, a college town known by many to be the most "bicycling friendly" in the U.S., has seen a marked drop in bike commuting between the 1990 and 2000 census in spite of having more miles of bikeways per capita than any other city. The reason? Davis has become too expensive for those of modest income (and who don't live on campus). Many who work in Davis have to live 15 miles away in Sacramento, and more affluent Sacramento workers are moving to Davis for the quality of life. Our own Key West used to have one of the highest bicycle commute rates in the nation (about 25 percent), again without any bike facilities. Parking was hard to come by, housing was

affordable, and the island's attitude is casual. Today the cheapest house for sale on Key West is in the \$600,000 range, and many people who work on the island must commute 20 to 30 miles up US 1 to find affordable housing. Bike commuting has dropped accordingly. In big cities like San Francisco, New York and Philadelphia people go without cars because it's so expensive to park them.

Auto ownership and parking are so inexpensive in most American cities that even those with the most extensive bikeway systems only see 2% commute rates (excepting college towns). Only a significant economic downturn or a significant upturn in the price of gasoline (and the former with follow from the latter) will move many Americans from car to bike.

So let's just focus on getting motorists to treat us better, on getting our fellow cyclists to ride more competently, and on getting more people to learn to enjoy cycling for the fun of it. The future will take care of the rest.

Want to Make Cycling Safer? Ride More and Invite Your Friends & Family!

For many years there was a belief held by many in the bicycle planning and safety field that a key factor in improving bicyclist safety is actually increasing the numbers of cyclists on our roads. Many non-cyclists and casual cyclists found this belief absurd. Their rationale was “bicycling is dangerous, and encouraging more people to do it is irresponsible until we have safe facilities.” Results from two recent studies now shows support for the more-equals-safer camp.

First, a study published in the British Medical Association’s journal Injury Prevention compared bicycle commute rates with bicyclist injury rates in 68 California cities. The study found that as bicycle commute rates increased, the numbers of injuries did not increase a corresponding amount. This means the risk for each cyclist decreased. The most impressive improvement happens between commute rates of zero to two percent. Overall, the risk per cyclist drops by about 80% between cities with the least cycling and the most.

The second study was a national Gallup survey for USDOT on peoples’ attitudes and usage of bicycling and walking. Survey subjects reported only 18% of their bicycle trips were on “facilities specifically designed for” bicycling.

We’ve also known for some time that, even though bike lanes are generally presented as facilities to improve safety, they can only affect a small percent of the cyclist/motorist crashes that actually occur. Most cyclist/motorist crashes occur when a cyclist or motorist fails to yield at an intersection or driveway, and overtaking motorist crashes – the type that bike lanes can address – account for less than 10%.

So how can it be that ...

- about 80% of bike trips happen on roads without bike lanes and
- about 90% of crashes can’t be eliminated with bike lanes...

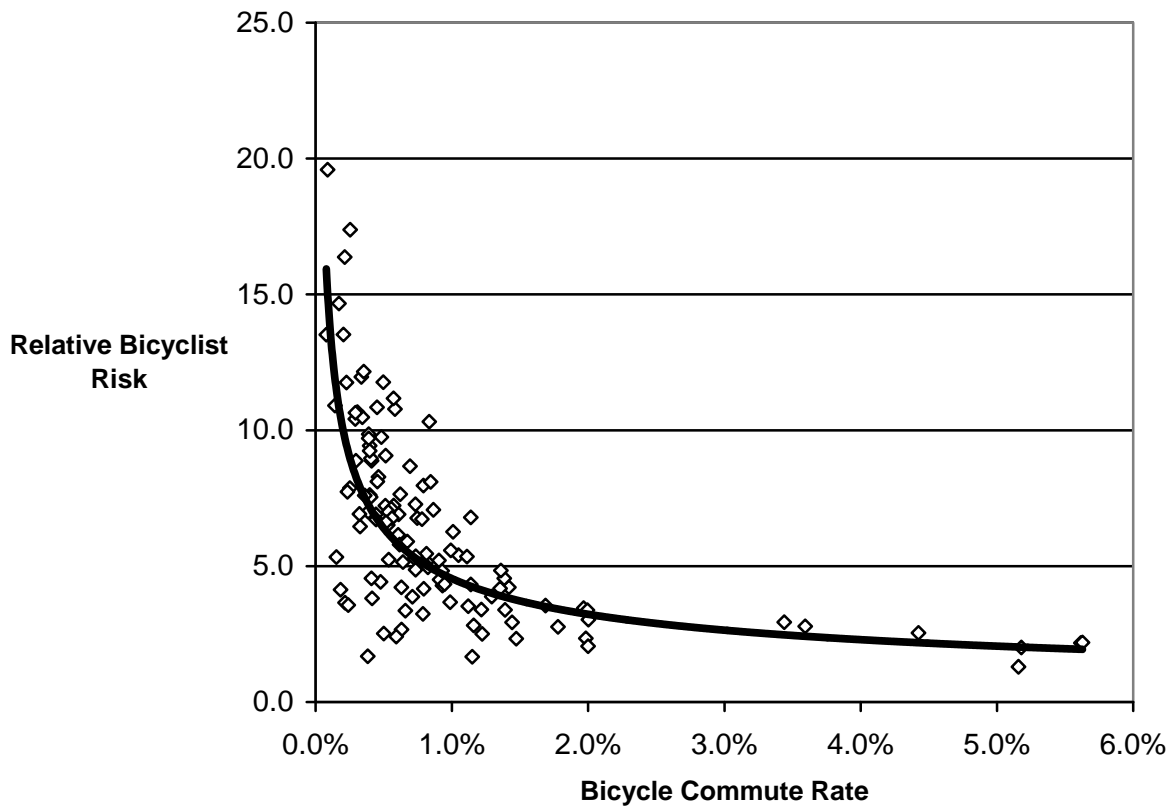
...yet cyclist/motorist crashes drop by 80% in cities with higher rates of cycling?

While it’s probably true that a higher percentage of bike travel occurs on bike lanes and shared use paths in cities with high commute rates, there must also be an increase in exposure to cyclists who travel to those facilities on regular roads, where most cyclist/motorist crashes already happen. Perhaps those cities with such great stats have excellent cyclist and motorist training programs, but that seems quite unlikely. What’s more likely is that motorists in such cities are both used to seeing and dealing with cyclists on a routine basis, and are more likely to know someone who

bikes. Bicyclist behavior is also improved through example and peer pressure when more cyclists are on the roads.

For me, the evidence points to a simple solution. Ride more, ride in conspicuous places, ride properly, and get your friends and family to do the same. The result will be a healthier, happier and safer community for all.

Relative Bicyclist Risk by Commute Rate in 68 California Cities



Expect a New Reality

It occurred to me the other day that I live in a different reality from nearly everybody else. Every so often I'll bump into a casual, non-cyclist acquaintance that I haven't seen for some months. As often as not that person will ask, "Still riding your bike?"

I find it hard to resist rolling my eyes and saying, "Well, duh. Yes, why wouldn't I be?" Perhaps I should respond with, "Sure. Still driving a car?" In my reality bicycling is normal. In theirs it's pretty strange.

In my reality bicycling is not only normal, it is safe, easy, and (most of the time) fun. In my reality separate bikeways are not necessary and most motorists are courteous. Of the few who aren't courteous, most are just pathetic convicts in a prison of their own making, so I try not to give them a hard time. However, I'm still capable of blowing my stack at an especially bad driver.

As I thought about my alternate reality, I realized it was created out of my unique experiences. I've been using a bicycle as my primary mode of transportation since I was 10 years old, and have over 150,000 miles of experience. As a regional bicycle coordinator, I also spend quite a bit of time studying how bicycling crashes happen, how likely they are, and which countermeasures are most likely to prevent them. My expectations, shaped by unusual influences, are very different from the norm.

In the book *The Continuum Concept*, Jean Liedloff studied the expectations of the Yequana tribe in the Amazon toward their children. It's a world that would shock most modern Americans; toddlers play with machetes and firebrands, four-year-olds practice hunting with real bows and arrows, and kids swim and play near rapids that would challenge kayakers – all with minimal adult supervision. Yet childhood injuries and deaths are less common among the Yequana than among our "civilized" kids. Their expectation is that children – even crawling infants – are naturally capable of learning critical life skills without overbearing direction or protection from their parents. Competence is natural; therefore it happens.

This dynamic also works in our culture; even with adults. Liedloff wrote of an American city hit by a blizzard so bad it even thwarted the fire department. The chief appeared on television to tell people to be especially careful with fire for a few days until they could get the streets cleared. During normal periods the city had about 40 fires per day. Fires dropped to four per day during the emergency. After the emergency the rate went back up to 40.

Liedloff wrote:

*“This placement of responsibility is an aspect of **expectation**, the force that can be seen to assert its power in so much of child and adult behavior. How could we be described as social creatures if we did not have a strong proclivity for behaving as we feel we are expected to?”*

Think of how this applies to bicycling in our culture. The expectation is that bicycling along with motor vehicles is dangerous; that a significant number of motorists are incapable of or unwilling to avoid hitting bicyclists, and that it is not possible for cyclists to learn how to avoid most motorist mistakes. Among most people that expectation is paired with the belief that it is the government's responsibility to protect bicyclists from motorists, and that building bicycling facilities is the only way government can solve the problem. Those of us who are comfortable biking without bikeways are accused of being “macho” or charged with extra testosterone. That's why seats in cycling courses sit empty. They're seen as irrelevant.

What happens in the mind of the motorist is even more important. Motorists who believe bicycling on roadways is dangerous will act accordingly. When I confront drivers who've cut me off and yelled at me to get on the sidewalk, they never say, “Because you were in my way.” It's not socially acceptable to give that as a reason. Instead they say, “'cuz you're gonna get run over.” Not by them, oh no, by that **other** guy. If bicycling on roadways is so inherently dangerous, then certainly a motorist has no responsibility to be careful around cyclists.

I bike assertively and take the full lane when conditions warrant. By doing so I create an expectation that the motorist will pass me safely. Like the fire chief during the blizzard, I make it necessary for them to behave correctly, so for the most part they do.

When bicyclists proclaim cycling on roads without bikeways to be dangerous, we give motorists the rationale they need to harass, threaten, and be careless toward us. The presence of bikeways, especially those separated from roadways with barriers, strengthens that belief even more. They are physical “evidence” that the government believes bicycling is so dangerous that we must be given separate places to ride. It's exactly the “evidence” wanted by those who don't want to share the road.

Conversely, if more bicyclists work to create an expectation that cycling is reasonably safe, if more bicyclists get the training they need to discourage and avoid bad motorist actions, and if we create an expectation that motorists will be responsible, then we will have much safer cycling and get much better treatment from motorists. Liedloff described expectation as a **force**. The power of positive expectations is in **your** hands. Create a new reality.

Trust Your Inner Monkey

Disorder in the house

Reptile wisdom

Zombies on the lawn staggerin' 'round

Disorder in the house

There's a flaw in the system

And the fly in the ointment's gonna bring the whole thing down

-- Warren Zevon

I've been swimming in the deep end of the library again. This time it's *"Evolution's End: Claiming the Potential of Our Intelligence,"* by Joseph Chilton Pearce.

Ever heard of the triune brain concept? Some neuroscientists divide our brains into three key functional components: the reptile brain, the mammalian brain, and the neo-cortex. The reptile brain handles basic sensory processing and primitive reactions. "Big thing move toward me; run!" The mammalian brain understands relationships and, if developed properly, intuition. "Hey, there were mangoes on that tree about this time last year; should be some there now." The neo-cortex takes information from both lower brains and applies abstract, intellectual thought.

Pearce believes that we "civilized" folks have been relying too much on our reptilian intelligence and our neo-cortex intellect, and ignore or suppress our mammalian intelligence. The intellect reacts to sensory inputs from the reptile brain and asks, "What can be done about this?" Then it goes about figuring out a totally rational way to deal with the problem. But since we often ignore and suppress the mammalian perspective, our intellects fail to fully understand the relationships inherent in the situation. Such attempts to solve problems often fail.

This is a key source of our culture's obsession with bikeways and its disregard for cyclist training. Our reptilian brains only understand that big, fast things are coming too close to us. Our mammalian brains could understand the full reality of the situation if we only gave them the chance. It's during childhood that our culture usually carries out its worst interference with our innate mammalian ability to deal with complex situations. Messages telling us to distrust our mammalian brains have been prominent in our culture for centuries: "we don't need the other animals," "breastfeeding is bad," "leave your tribe and get a job in the factory," etc.

Nobody told me bicycling was dangerous when I was a kid. I was given a few simple rules to follow and sent out into the world to figure it out. (Conversely, my mother, who did not know how to swim, instilled in me a fear of water that took years to overcome.) Through years of exploration and informal education I figured out much of what I needed to know about

cycling on roads. Keep in mind this was not in some small town, but in a bustling, traffic-choked suburb of Cleveland, Ohio.

Today's kids are repeatedly told bicycling is dangerous. Their parents, who never learned how to bike in traffic themselves, inhibit learning instead of teaching them how. The reptile/intellect team understands vulnerability, but since it's been ignoring the mammalian brain it has a weak grasp on *risk*, which is based on more complex relationships. To be safe we have to understand both vulnerability *and* risk.

Most parents and their kids have an incomplete understanding of the relationships between motorists and cyclists. All they understand is the reptilian message: "Big, fast thing come from behind; get out of the way!" Since they are vulnerable, have "nowhere to go," and the government controls the streets, they beg the government to give them such a place: a "bike path," a sidewalk; some will say a bike lane. Of course the bike lane is just a bit of paint on the road, and the intellect says, "Hey, I'm not *stupid*; there's nothing to keep that big fast thing from crossing that line! I want a curb!"

Since the mammalian brain has been left out of the discussion, the complexities of relative speeds, perception and reaction times, braking distances, turning movements, and scanning at intersections are never analyzed. So, in places where governments have responded to this reptile wisdom, we have paths that force bicyclists into conflicts they don't understand, and those conflicts are more difficult to deal with than the ones a cyclist would encounter on the roadway.

This thinking also makes cyclist education a tough sell. Some people who've been cycling a while have a better-than-average understanding of the traffic relationships, but their comprehension could be better. Convincing these cyclists that they could benefit from education and training is difficult because they "think they know it all." The training program developed by the League of American Bicyclists is a compilation of hundreds of years worth of experience from dozens of veteran cyclists who understand traffic relationships. *No matter how experienced you are, the combined knowledge of these cyclists is greater.* At the other end of the experience spectrum is the cyclist who has ridden only a little bit and has been frightened by careless or aggressive motorists. Since role models who understand how vehicular cycling works are very rare, the cultural voices reinforcing reptilian wisdom are the ones most believed. Our "take a pill" culture sees helmets as the only remedy.

If you've ever heard the bozos on talk radio rant about cycling you've heard the ultimate expression of reptilian bicycling wisdom. Do you need any stronger proof you should trust your inner monkey?

Learning to Share

A Mr. Jake Lancaster recently sent an e-mail to FBA's new *Share the Road* website (www.sharetheroad.org) arguing that bicyclists and motorists sharing roadways is the dumbest idea in all of recorded history. I'd originally assumed that he didn't want to share as a motorist, but his reply to mine showed that his concern came as much from his experience as a bicyclist. Here are some excerpts.

"Bikes not riding in the same space with cars has to do with people not getting killed. It doesn't have anything to do with not being willing to share. For your information, my daughter was almost killed riding her bike, legally, in the so-called bike lane, after she was hit from behind from a minivan. She will never ride in the road again, and neither will I. I repeat; it is the stupidest idea of all time."

It's certainly understandable for such an event to strongly color one's perspective. Most people do not have access to sound data on how bicyclist/motorist crashes are most likely to occur, and many of those who do get to hear the truth will still put more faith in their emotions. I can't fault them, it's just human nature and how (most of us) we're taught.

"By the way, I am an avid bicyclist, too. But I only ride where there is a bike path, clearly out of the way of cars. As you probably know, since you no doubt are one of them, the spandex/bike helmet crowd are among the most arrogant humans on the planet. Why don't you share the bike path with skaters, joggers, etc? Oh, that would be terrible wouldn't it? It might mean you would have to slow down every now and then, or pass somebody. Instead, you insist on riding in the road, slowing down traffic constantly. Who's really not willing to share? Cyclists!"

Ouch! There are some kernels of truth in that paragraph. We all know of groups that give roadway sharing a bad name, and we also know how frustrating it is to have to ride slow on a shared use path (about as frustrating as it is to wait to pass a cyclist when we ourselves drive cars).

"I'll tell you when it makes sense to bike in the same lane as a car -- when you can pedal your bike at the same speed as the cars go. Since bikers average about 15 MPH, that means you should rarely, if ever, be in the road with cars. I'm not talking about what is legal. I'm talking about common sense. Lots of things are legal that are stupid ideas."

Mr. Lancaster's base assumption is the key problem here; that bicyclists get run over because they're generally slower than motorists. Of course this ignores the fact that motorcycling is many times more dangerous than bicycling even though motorcyclists have no trouble keeping up with other

vehicles. This assumption might also lead us to believe that crossing the street as a pedestrian should also be illegal, since it results in far more deaths than cycling legally on roadways.

He clearly supports the cyclist's need and right to get around on public rights-of-way, but believes that the most responsible thing to do is to stay off the roadway and keep to sidewalks and "bike paths." Not because cyclists are "in the way," or "don't pay gas taxes," or "don't have driver's licenses," or any other such specious argument, but because it's just not safe.

I agree that road users should choose the safest means possible for getting around. One might reasonably argue that one shouldn't feel compelled to share space with someone who is not behaving in a reasonably safe manner. A motorist might not suffer severe consequences in the event of a crash with a cyclist, but such a crash still poses a negative impact that the driver should not have to suffer if he's innocent. So what's the safest? On a per-hour of exposure basis, cycling is about half as risky as being a driver or passenger in a motor vehicle, and cycling on roadways is about one-fifth as risky as cycling on sidewalks. It all comes down to this: *Since bicycling legally on roadways is clearly safer than bicycling on sidewalks, motorists have the responsibility to share, and cyclists have the responsibility of making sharing work better, as long as they don't compromise their safety or mobility.* And by the same reasoning, pedestrians are justified in *not* wanting to share the sidewalks with cyclists.

In order for the *Share the Road* message to be perceived as legitimate, legal roadway cycling must be understood to be the safest form of cycling. As cyclists **we** have the strongest say in how cycling is perceived. If **we** say legal roadway cycling is dangerous, motorists will agree and see *Share the Road* as an absurd campaign. If we say roadway cycling is the **safest** form of cycling, then discussion begins and we can make our case that our claim is true. The success of *Share the Road* depends first-and-foremost on **us**.

Traffic Justice

"The profoundly wrong-headed road regime of contemporary America is more than an engineering problem; it constitutes a deeply violent and anti-social assault on life, health and community."

Charles Komanoff

At the 2006 ProWalk/ProBike Conference in Madison, Wisconsin this September, the National Center for Bicycling and Walking (NCBW) kicked off its newest project: the Traffic Justice Initiative. The timing couldn't have been better. Less than two weeks earlier, the National Highway and Traffic Safety Administration (NHTSA) announced that U.S. traffic fatalities increased from 42,836 in 2004 to 43,443 in 2005, and that pedestrian deaths were a large part of that increase, rising from 4,675 to 4,881.

Traffic deaths and injuries seem to be something this country is willing to tolerate as a cost of mobility. But who gets to decide what's acceptable? It's those who travel around protected with steel, belts, and airbags who call the shots. NHTSA's measure of success (or failure) is biased towards increased auto use; injuries or deaths per vehicle miles traveled is a reasonable measure only if you believe driving more miles is a key goal in life. Look at all the prominent initiatives on NHTSA's website (www.nhtsa.dot.gov). Most strive toward "safe crashing" -- seat belts, air bags, helmets -- a strategy that leaves cyclists and pedestrians mostly unconsidered. It doesn't even work terribly well for motorists; some in the field have noted that improved emergency medical care is largely responsible for keeping the fatality numbers from climbing even more. So we're just maimed, not killed.

The Traffic Justice Initiative wants to change NHTSA's safe crashing mentality to a goal of less crashing. To do this we (the cycling and walking advocates) have to broaden our scope and network of partners. While pedestrians and cyclists suffer a disproportionate risk of death or injury, only an across the board approach to reforming traffic safety will work.

Khalil Spencer of the Bicycling Coalition of New Mexico is a chemist at Los Alamos National Laboratory, where hazardous materials and processes abound. He proposes that the nation adopt the same approach as used at Los Alamos: it's called ALARA -- As Low As Reasonably Achievable. This approach requires that we analyze and mitigate the risks imposed by the operation of our vehicles. In Spencer's words, it "requires all users to maintain high levels of competence and 'sign on' to a safety culture that assumes that all accidents and injuries, if not completely avoidable, can be reduced drastically to rates approaching zero."

On the crash justice side of the problem, one of the key problems we see in high-profile fatal cyclist or pedestrian crashes is that carelessness that results in death bears only minor penalty. Recklessness, which is the “willful and wanton disregard for life and property” and is a criminal offense, requires a much higher standard of proof, and drivers are rarely so charged. So we have an enormous gap in which a careless driver who kills is given at most a few hundred dollars fine, and a reckless driver who kills goes to jail for quite a few years. There must be some middle way, and we must treat motor vehicles as the potentially deadly devices they are. Carelessness with a gun that results in death will get you a prison sentence, while the same results with a car gets you only a fine.

Justice must also be a part of how our streets are designed and our speed limits are determined. Traffic engineers normally use something called “the 85th percentile rule” when setting speed limits. This “rule” says that 85 percent of drivers are good and conscientious, so the uppermost speed at which the slowest 85 percent drive is reasonable and safe. This is presented as a democratic means of setting speed limits, but the most vulnerable users of our public ways are left completely out of the decision. Is 45 mph a reasonable speed on an urban arterial when you’re a 75-year-old woman trying to cross the street on foot? When you’re an 8-year-old boy on a bicycle? The 85th percentile rule doesn’t take their needs into consideration, and is therefore unjust.

I’m only scratching the surface with this short column. The Traffic Justice Initiative is an enormous opportunity for the cycling community to take a leadership role to improve a situation for which the government has only given lip service. To learn more go to www.bikewalk.org/tji.php.

Freedom from Fear

This piece is my attempt to use data and reason to show people that cycling on roadways, even with heavy auto traffic, is reasonably safe. Since writing this, I've come to realize that it's mostly a waste of time to pursue such an approach. Most folks don't use reason to make many of their decisions.

Fear is the mind-killer.

Fear is the little death that brings total obliteration.

I will face my fear.

I will permit it to pass over me and through me.

And when it has gone past me I will turn to see fear's path.

Where the fear has gone there will be nothing.

Only I will remain.

– protagonist Paul Atreides in the Frank Herbert novel *Dune*

Undoubtedly, one of the most common deterrents to bicycling is fear. Fear of motorists. Notice I said "motorists," not "cars" or "traffic." When people talk about bike safety, especially those who are afraid to bike on the roads, they aren't much concerned about potholes or dogs or sand on the corner or their ability to control the bike. They fear the motorist they can't see and who supposedly can't see them. This fear is based on the belief that a significant number of motorists are likely to hit bicyclists while overtaking them. This fear is the most important of all cyclist fears because most cyclists believe there is absolutely nothing they can do about it. Does it happen? Yes. Is it common? Not at all.

Beliefs are survival tools our brains use when we don't have sufficient direct sensory information to make a decision. Good beliefs can protect us from potential dangers. Bad beliefs mislead us into being fearless when we should be wary or fearing the wrong things. While I sit at my desk in my office I *believe* my bike is sitting in the bike locker where I locked it and left it, even though I have no evidence to support that belief. It's not until I go out there, open the locker and look inside that I *know* my bike is actually there. I couldn't function sanely if I spent the day believing my locker was being broken into. Conversely, if I believed no one would wish to steal my bike, I wouldn't bother locking it and would again sit at my desk believing it was still there.

What kinds of events contribute to our beliefs about bicycle safety? First and most common is sensory information -- observation of the motorists and bicyclists around us. Such observations often convince people that bicycling is unsafe. It only takes a few incidents of carelessness or rudeness by motorists to convince some that cycling is a dangerous activity even though most interactions with motorists are non-threatening. We humans are easily startled when something big comes rushing up from behind us. *Think --*

predator! Even after 25 years of cycling an overtaking car still occasionally startles me.

Second are the lies that motorists tell when they have treated cyclists poorly. Catch up to a motorist after one has nearly sideswiped you and you'll most likely hear one of the following lies: A) "I didn't see you." B) "You belong on the sidewalk." C) "You're supposed to ride all the way to the right."

Third are stories about crashes. The media does not report "20,000 people rode their bikes today and none of them were hit by motorists." They usually report that someone has been killed while cycling and make little or no effort to explain why the crash occurred.

The fourth way is through statistical data on bicyclist-versus-motorist crashes. Here again the information is skewed toward the negative. The statistical data people receive through the media is vague and misleading.

My purpose on these pages is to show you why proper cycling on roads is quite safe and can be accomplished by normal adults. I'll be covering a few statistics (okay, a lot of statistics) my own experiences, the skills and practices necessary for safer cycling, and some reasoning about the motorist's perspective.

The Crash Data

I collect a good deal of information about cycling crashes. It's part of my job as a bike coordinator. Regrettably, what most people get to see are just raw numbers and media reports. (Some are even echoing these reports in their arguments to get cyclists removed from the roads.)

For example: in Orange, Seminole and Osceola Counties there were 644 bicyclist-versus-motorist crashes in 1994; 11 resulted in death. Scary thought, huh? But how many of those involved a cyclist driving on the right side of the roadway (not on the sidewalk) during daylight hours and obeying the signs, signals and rules of the road? Only 74, and of those not one was a fatality. Of those 11 deaths, 8 occurred at night, and 5 involved cyclists hit from behind. (How often do you see a cyclist out at night without lights?) The other 3 daytime deaths involved kids who failed to yield (ages 10, 15 and 16). These are the proportions of crash types you'll see in most Florida cities.

Of those 74 crashes, 24 involved an overtaking motorist, and that's the type of crash people fear most. That's 24 daytime, non-fatal, motorist-overtaking crashes for an entire year for an area with more than 1.1 million licensed motorists (not including tourists). That means only one motorist out of 46,000 (0.002%) in our area in 1994 was so incompetent as to hit a bicyclist from behind in broad daylight. Only 13 resulted in significant

injuries and only 4 in incapacitating injuries. Only 2 of the 24 motorists claimed they "did not see" the cyclist.

So what's happening? A very small number of motorists are unsafely and unsuccessfully passing cyclists and the ensuing crashes are sideswipes that result in mostly minor injuries. Fortunately there is a way that *you* can reduce the tendency for motorists to pass unsafely. None of these overtaking crashes occurred on roads with wide curb lanes, bike lanes or paved shoulders. They happened on narrow lanes. And the law says that when the lane is narrow you are allowed to leave the right-most side and ride toward the middle.

"What of the other 50 crashes?" you ask. They resulted in 27 significant injuries; 4 incapacitating. They mostly involved motorists who failed to yield at intersections and driveways, and neither bike lanes, sidewalks nor paths offer protection from such crashes. Indeed, on sidewalks and sidewalk-style bikeways you will be more susceptible to such crashes, not less. On the roadway you'll be more visible. The same defensive driving skills you use as a motorist will normally keep you out of such crashes.

And what of those scary media reports of cycling deaths? The old newspaper adage goes: "Dog Bites Man?"... that's not news. 'Man Bites Dog,' now *that's* news." The commonplace goes unreported; the unusual gets the coverage. Furthermore, we like to have our beliefs reinforced and media producers share the belief that bicycling is dangerous. No one likes being told their beliefs are wrong.

If I owned a radio station I would broadcast a daily bicycle crash report. The most common report would go like this: "Twenty-thousand people rode bikes today. Only one was involved in a crash with an automobile. He was slightly injured while riding on the sidewalk facing traffic and was struck by a motorist exiting a driveway."

Individual Risk

What are the odds of one individual (like you or me) getting hit from behind by a careless or incompetent motorist? The experiences of a handful of other cyclists do not determine your personal risk of being hit by an overtaking motorist. What determines your risk are *your* behaviors and the behaviors of the passing motorists.

I'll use my own experience here; I encourage you to work out your own numbers.

First let's look at my old commute to work. For about 3 years I bike-commuted 6.5 miles each way to our old office in Winter Park about 3 times per week. (Today the office is only 1 mile away in downtown Orlando.) None of the route had bike lanes. About 2.5 miles had wide curb lanes, but the remainder had narrow lanes (11 feet or less) and about a mile of that

had parallel parking. Not what most folks would call “bike-friendly.” It took about 35 minutes, with about 5 minutes spent waiting at red lights. I would say a car would pass me on average every 15 seconds, 4 passes per minute. That works out to 720 passes per week; 108,000 passes over 3 years.

I’ve been cycling for over 25 years at about 5,000 miles per year. Probably 2,000 of the 5,000 were urban and suburban, and mostly here in the Orlando area. The vast majority of those miles have been on roads without bike lanes or paved shoulders, and few had wide curb lanes. At 15 mph that works out to about 3,300 hours of urban cycling. At 4 per minute (a *very* conservative estimate) that comes to about 792,000 passes. Out of over three-quarters of a million passing motorists, not one has hit me. (I haven’t experienced any type of motorist-versus-bicyclist collision in 25 years, unless you count the time I ran into the trunk of a parked car while adjusting my toe strap as a teen.) If 1 out of 10,000 motorists (one-hundredth of a percent) who passed me failed to see me, and 10 percent of those who didn’t see me didn’t avoid me I would have been hit 7 or 8 times in the past 25 years. Did I mention I also ride regularly in rain and darkness?

What about “luck?” Luck is a superstitious belief system some use when they don’t understand statistical odds. Remember, only 24 cyclists were hit from behind during daylight hours in our area in one year. If luck had anything to do with it, then there are thousands of “lucky” cyclists in our area. Millions of bicycle trips are made each year but only a handful result in injuries or death. Those who use the sidewalks seem to be less “lucky” since 198 of them were hit at driveways and cross-streets (eight times as many as those hit from behind).

I’m a normal person with normal skills. I make no claim of invulnerability. To claim invulnerability from the risk of passing cars is comparable to claiming it from lightning or tornadoes. While these forces are undeniably lethal, none are very likely to happen to me, or to you.

Training, Skills and Practices

Speaking of skills, another erroneous belief is that to ride safely in traffic one must be an “expert” or have “special skills and training.” Strangely, people who believe special skills and training are necessary don’t bother to suggest what those skills or training might be. Perhaps it’s because they don’t know what they are.

Using myself as the example again, I ask, “What particular special skills have I mastered to consistently keep overtaking motorists from hitting me?” None that I know of. I’ve used a rear-view mirror attached to my helmet, but don’t look at it every second. Besides, I don’t think looking in a mirror is

a special skill; motorists do it all the time. My mirror broke a while back and I got along fine for a few months until finally replacing it.

What about training? In elementary school in the 1960's I got the usual "Officer Friendly" presentation on bike safety. His message? Always stop and look both ways before entering the road, ride on the right side of the road, stop at stop signs and red lights, and signal your turns. That was my sole bicycle safety training until I was into my early 20's. My parents didn't (and still don't) ride any significant amount. (Dad was surprised to learn you're required to ride on the right side of the road, not the left.) As a kid I rode an enormous amount of mileage compared to most. Every day during summer vacation I was out on the suburban streets and country backroads, traveling farther and farther each year. At age 14 I rode my first century, solo. I was doing self-supported, multi-day touring before I graduated high school. The bike continued to be my primary mode of transportation after I got my motor vehicle operator's license. For about 10 years I rode entirely on roads with no more training than the police officer's simple presentation. This did not occur in some sleepy small town, but in the bustling suburbs of Cleveland, Ohio. I did not see my first bike lane until I was 27. In my early 20's I started reading *Bicycling Magazine*, and picked up some pointers there. I didn't ride regularly with a club until 1988. I didn't read John Forester's tome *Effective Cycling* until seven years ago. So much for the argument that safe cycling requires elaborate training.

I will not deny that I am an "expert" cyclist today (guilty as charged!), but I wonder when it was that I graduated to that level. I suppose one could say I was an "expert" cyclist at age 14 since I rode that solo century and regularly rode in heavy traffic. But I somehow achieved that level with no more training than the "Officer Friendly" pitch.

What skills and practices do I use while cycling? Let's break those skills and practices into two types, *General Driving Skills and Practices* and *Cycling-Specific Skills and Practices*. General driving skills and practices are those you use when driving *any* vehicle. Ask yourself if you are capable of all of these:

- traveling on the right
- stopping for stop signs and red lights
- yielding when entering the street
- scanning for and negotiating with overtaking traffic before moving left
- scanning for threats from cross-streets, driveways and turning vehicles
- keeping out of the right turn lane when going straight
- turning left from the left or left turn lane

If you practice all of the above you will eliminate the vast majority of motorist-versus-cyclist conflicts and crashes.

Cycling-Specific Skills include balance and steering, braking, shifting, and scanning over your shoulder. Three emergency maneuvers are taught in the *Effective Cycling* curriculum and other bike courses: the "rock dodge," the "quick stop" and the "instant turn." In 25 years I've not used either of the last 2 except when teaching *Effective Cycling* courses. At bike rodeos we teach 10-year-olds how to do the "rock dodge" in a couple of minutes. If you've been cycling a while you probably do it instinctively. There were 2 crashes in 1994 that involved an overtaking motorist and a cyclist avoiding an obstacle, one of them at night and neither involving serious injury.

Obviously you're not going to head out onto a busy road without having mastered balance, steering and basic braking. Many novice cyclists don't understand shifting, but I don't see any evidence that that leads to a significant number of crashes. That leaves scanning over your shoulder. Now it's not the scanning that's the skill, but scanning without making the bike swerve. We can teach this skill to 7-year-olds in a few minutes. Most readers of this article are already capable of it. In 1994 there were ten cases in which an adult cyclist *supposedly* veered left in front of an overtaking motorist. Four of them were riding in the dark or at dusk and one was intoxicated. It's critical to understand that this skill is necessary whether one is in a bike lane, on a sidewalk, or on a road without any special accommodation for cyclists.

(I say *supposedly* because "He just veered out in front of me!" is almost as common as "I didn't see him!" Experienced cyclist Duke Breitenbach was hit and injured in Lake County by a motorist who had just passed three other cyclists on a four-lane highway on a bright, sunny day. The driver said, "He just veered out in front of me!" and the Florida highway patrolman believed him. Duke told the patrolman he most certainly did not veer, but the officer treated the cyclist with a Ph.D. as though he was a juvenile delinquent.)

Now we come to cycling-specific *practices*. Taking the lane is the most important cycling-specific practice because the ones mentioned above won't discourage motorists from passing you in an unsafe manner. If the lane you're in is too narrow for a motorist to pass you safely and you keep all the way to the right, some motorists will try to pass you within the same lane. This is both dangerous and unpleasant. Dangerous because you will have no room to maneuver around a road hazard and the motorist may even sideswipe you. I guess I don't have to explain "unpleasant."

Another very important practice is keeping at least three feet from the driver-side doors of cars parked on the roadway. This very similar to taking

the lane. In big cities like New York and San Francisco “dooring” is a very common and serious crash.

Taking the lane is something I’ve only been doing since I read *Effective Cycling* about six years ago. I’ve noticed a few important things since then. First is that I have far fewer close calls with passing cars. My roadway position forces motorists to give me a wider gap. I’ve found it to be less stressful cycling this way. No, I do not experience more annoyed or aggressive motorist behavior. But when a motorist does get annoyed and passes aggressively I have much more room to maneuver. As for the threat of the inattentive overtaking motorist, all I can say is I’ve yet to hear the sound of squealing brakes coming from right behind me. Horns? Yes, but no more than before.

Behind the Eyes and Between the Ears of the Big, Bad Motorist

A while back I mentioned lightning and tornadoes. Reasonable people strive to understand the true nature of such forces so they can learn to avoid harm. In the same way, a cyclist must learn the true nature of motorists.

We can break motorists into four classes: competent ones who don’t want to hit us, incompetent ones who don’t want to hit us, intimidators who don’t want to hit us, and those who want to hit us.

If you bike in a vehicular manner, follow the rules and use lights at night, the competent type will not hit you. Why? Because you are both acting in a predictable manner and following traffic rules based on logic.

The intimidator will honk, scream, and even maneuver in such a way as to threaten you, but won’t hit you unless you escalate the conflict.

There is very little you can do to avoid being hit by the psychotic fourth type. Neither a wide curb lane, bike lane nor paved shoulder will stop them. But worrying about them is like worrying that ball lightning will come bouncing into your house and smack you in the head. Cycling only on paths separated from the roadway might work, but keep in mind that *cycling on sidewalks increases your risk of being hit at a cross-street or driveway two- to ten-fold regardless of your level of experience*. Stories of motorists who hit cyclists with intent to harm or kill fall into the “Man Bites Dog” category. In over 125,000 miles and 25 years of cycling I’ve had only one motorist attempt to hit me. He did so because I made him pass me twice on a narrow roadway. I recommend you not do that. Now we’re left with the incompetent motorist.

Even incompetent motorists care about self-preservation. The primary threat to a motorist is another big vehicle coming from the side or front, so that’s where his attention will be. On urban and suburban roads there are many driveways and cross-streets, so motorists are always on the lookout for what’s ahead of them. In order to be avoided you must be seen. The

best way to be seen by a motorist is to put yourself where he's normally looking – right in front of him. The one serious exception is the intoxicated driver. I avoid cycling after dark on major roads on Friday and Saturday nights. Of course intoxicated motorists put everyone at risk; motorists and pedestrians as well as cyclists.

Taking the lane forces motorists to move into the adjacent lane and gives you the space you deserve. I recently wrote an article about roadway positioning and one reader said he disagreed with my recommendation to take over a narrow lane. He said he always rides "right on the white line," is frequently passed too closely by motorists, has been run off the road a few times, and that when he gets a chance to confront them they inevitably say, "I didn't see you!"

Both he and I have biked for many years. I've been taking the lane for more than five years. (Before that I my experiences were quite similar to his.) Why did those motorists "not see" him yet consistently see me? The answer is simple; they *did* see him. Of course they're going to say they *didn't* see him, they just startled or threatened him through rudeness or carelessness and probably believe he doesn't belong on the roadway. The motorist will blame only one of two people, the cyclist or himself. The cyclist on the roadway – even the one riding on the white line – is in plain view of motorists. If motorists routinely missed seeing bicyclists riding straight ahead of them it would be the most common type of motorist-versus-cyclist crash, but it's one of the least common. "I didn't see you" really means, "I intentionally passed you in an unsafe manner but I don't want to admit it." They might as well say, "I cannot be held responsible to avoid hitting you because you are virtually invisible."

Here's a story to illustrate the silliness of the "I didn't see you" line. My wife Carol and I were on our tandem at dusk in downtown Orlando. We were signaling a left turn and moving into the center of the lane. A motorist passed us on the left, crossing the double yellow line, again, *as we were signaling a left turn*. After the unsafe pass I decided to go straight instead of making our left and see if we could catch her. We caught up with her a few blocks later as she was exiting her SUV to enter a house and I asked for an explanation for her action. She said she hadn't seen us. We were on a tandem with a trailer with a yellow flag and a flashing red taillight on a slow-speed, well-lit street *and she crossed the centerline to avoid us...but she "didn't see us."* What were her response choices? A: "I'm sorry, I shouldn't have done that" or B: "I didn't do anything wrong; you did something wrong." But since she couldn't identify anything we had done wrong she could only say, "I didn't see you."

If so many motorists don't see you, how do they avoid you? They are *very* likely to hit you if they don't see you, even if you're riding on the white

line. If they do see you, why do they pass you in an unsafe manner? Because you let them or they are extremely rude or maybe a combination of both. If someone's going to be rude to you, where do you want to be, up against the curb with nowhere to go or out in the lane where you have room to maneuver?

Unfortunately there is an important difference in behavior between urban/suburban roads and rural roads. Out on rural roads motorists often let themselves get distracted. This is especially true when the road is very straight and there are long distances between intersections. High-speed, fatal, motorist-overtaking crashes are the ones that draw the notice of the club cycling community and the media, since they usually happen to "one of our own" and to someone who does a lot of cycling. These deaths are relatively rare, but their emotional impact is far-reaching. Our only recourse to reduce these is to push for strengthened motorist training and accountability, for paved shoulders, and for the removal of dangerous motorists from the roads.

We all have our stories about aggressive motorists, but most result in just that – stories. Many of us have friends or acquaintances who have been hit or even killed (I've lost two). But then, those of us in bike clubs know a lot of cyclists. These deaths are always on high-speed rural highways. Florida has more than its share of long, straight, boring rural roads where motorists can nod off or distract themselves with radios, cell phones, cassette players and whatever else. Out there you have to make yourself as conspicuous as possible; a solid and brightly colored jersey is best.

The more bicyclists people see the more they will look for them and the more they will believe that bicycling is a reasonable means of travel.

National Risk Analysis Rates

There's no such thing as absolute safety. Risk is a relative thing. In 1993, Exponent Corp. (then Failure Analysis Associates, Inc.) published fatality rates for various activities. Here is how some of the activities scored, in Fatalities per Million Hours of Activity:

Motorcycling	8.80
Life Overall	1.53
Automobile travel	0.47
Bicycling	0.26
School bus travel	0.22
Airline travel	0.15

Cyclist Ken Kifer validated Exponent's rate using data from the Bicycle Institute of America on his Web site, Ken Kifer's Bike Pages (see Sources).

That 0.26 rate applies to *all* bicycling fatalities. Here is some recent data from the Florida Department of Highway Safety and Motor Vehicles to further break them down. There were 117 cycling fatalities in Florida in 1999; 91 were adults (18 and over); 54 of those adults were riding at night.¹ Only 5 (4%) were sober adults riding during daylight hours on the roadway *and* obeying the rules of the road. Four percent of that 0.26 rate comes to 0.01. One should also keep in mind that only about 44% of motorist fatalities involve 2 or more vehicles (National Highway Traffic Safety Administration), so we could drop the risk of being killed as a motor vehicle occupant by another motorist to 0.21. So proper daytime vehicular cycling for sober adults (even on those “dangerous” rural highways) is about 15 times less fatal than airline travel, which is widely considered to be one of the safest forms of transportation available, and 21 times less fatal than being an occupant in an automobile.

Fatalities aren't the only crashes we worry about, of course; what about injuries? In a study of trampoline safety, Exponent included comparisons of bicycling and automobile injuries (as Hospitalizations per Million Hours of Activity):

Football	12.4
Bicycling	7.5
Automobile	3.0
Trampoline	2.5
Swimming	1.9

Don't let that 7.5 number mislead you though. Once again, the above includes *all* bicyclists and *all* types of crashes (including mountain biking). We're concerned here with just the motorist-versus-cyclist crashes. Professor William E. Moritz at the University of Washington surveyed experienced cyclists in 1996 on their activities and crashes. He found only 11% of their crashes involved motor vehicles. Experienced cyclists also experience one-fifth as many crashes per mile as “novice” cyclists. So the risk of being injured by a collision with a motorist is certainly much less than the 7.5 per million hours shown above.

How much less? We may not have enough data to calculate that. The rough cut estimate would be to take just the 11% that involve motorists from the 7.5 hospitalizations per million -- that drops us to 0.83. But we really need to know how many hours of on-road exposure cyclists experience, plus the number of injury-producing crashes with motor vehicles in which the motorist was at fault. (While it's not appropriate to apply the

¹ I am not saying that people should not ride at night, only that cyclists should make themselves conspicuous.

data from fatalities to injuries, remember that only about 4% of Florida cycling fatalities involved a sober adult cyclist obeying the rules of the road and riding during daytime hours.) Moritz estimated that his survey respondents experienced crashes (of all types) on major roads *without* bicycle facilities at a rate of 66 per million miles (or one crash per 15,000 miles). Those same cyclists traveled only about 7,000 miles per crash on multi-use trails and about 700 miles per crash on sidewalks.

Don't Forget the Good Stuff

I could spend many pages describing the benefits we get from cycling that more than balance out the small risk. Here's one recent example: a 1999 study from Sweden on physical activity and health found, "Even after adjustment for other risk factors [and that includes crashes], including leisure time physical activity, those who did not cycle to work experienced a 39% higher mortality rate than those who did."

What Does All of This Say About Cyclists and Society?

Very young children will cover their eyes when playing "peek-a-boo" with their parents. They believe that because they can't see their parents, their parents cannot see them.

Most of us believe what we want to believe. Those who want cyclists out of the way because they see them as a hindrance will certainly use ignorance, lies or sophistry (plausible but fallacious argument) to convince us that bicycling on roadways is dangerous. They use the false-danger argument because society tells them it's wrong to say they're superior to others. It's socially acceptable to say bicycling is inherently dangerous, not that a fellow citizen is a nuisance when exercising a basic liberty. But the most effective way in which motorists convince cyclists that they don't belong on the roads or that they will be in great danger is through intimidation and harassment. Such behavior reinforces the scare stories and bad statistics in the media. That is why I encourage cyclists to take legal action when motorists commit assaults. (Assault does not require physical contact, only threat.) Such incidents are rare, but ripple through the community as a wave of intimidation.

Being afraid of real risks and threats is healthy. But the belief that bicycling is dangerous is based on intimidation, scary stories and vague statistics. The bicycling community must attack the true threat to bicycling – the attitude that cyclists are intruders, second-class road users or sacrificial lambs. We cannot and will not change that attitude by saying, "Please give bicyclists a place to ride." Indeed, such pleas reinforce the belief that bicycling on roads is dangerous.

We change it by saying, "Bicyclists are human beings, citizens and vehicle drivers, and have the inalienable right to liberty. Travel on our

shared public roads is an essential element of this liberty. Treat us with respect."

And by encouraging one another to claim our rightful piece of the road.

Sources:

"Is Cycling Dangerous?" From the Web site of Ken Kifer --
<http://www.kenkifer.com/bikepages/health/risks.htm>.

Effective Cycling, John Forester, MIT Press

Why Bad Beliefs Don't Die, Gregory W. Lester, Ph.D., Skeptical Inquirer,
November/December 2000

Exponent Corp. Web site, <http://www.fail.com/index.html>

"All-Cause Mortality Associated With Physical Activity During Leisure Time, Work, Sports, and Cycling to Work," Lars Bo Andersen et al, American Medical Association, <http://www.archinternmed.com>

Bicyclists, Motorists and the Language of Marginalization

Racism, Sexism and Mode-ism

Some might be offended by the idea of comparing the hatred and violence directed at bicyclists with the hatred and violence directed at people due to race, culture or gender. Yet, I believe it is entirely appropriate.

In his book *The Culture of Make Believe* author Derrick Jensen shows how violence in our culture is tied to three factors. First, is the person significantly different from me; do I see him or her as less human, or less important, than myself? Second, does this person seem to have something I want, like resources (as the American colonists saw the native tribes) or labor (as Europeans and colonists saw Africans), or do I see this person as a threat to the resources I hold (as the Nazis saw the Jews). Last, will my culture support, accept or choose to ignore my hatred or violence? If the answer to all three is yes, violence is all but inevitable in our culture.

One can be significantly different not only by being born to a certain race, culture or gender, but also by choosing to live in a different way. The problem is broader than racism or "mode-ism." It is a way of thinking that is pervasive in our culture; the belief that power and privilege deserve the highest regard and the lion's share of the rewards.

To some in our culture, bicyclists are strange people who wear odd clothes and act childish. Native Americans were described in those same terms by colonists. But what do we take, or seem to take, from motorists? It's time, the ultimate abstract resource. We are perceived as being a "hindrance" to motorists. We supposedly steal their precious time. (Never mind that the vast majority of motorist delay is caused by motorists.) And where does our culture stand on hatred toward cyclists? I can't say it's supported, but it is often ignored and accepted as "natural."

African-Americans can't change their skin (without a lot of money) (and shouldn't have to) to improve their lot in life. Women can't change their gender (without a lot of money) (and shouldn't have to) to improve their lot in life. Most bicyclists, after all, choose to be bicyclists. But it wasn't many years ago that a white person could be attacked or even killed for choosing to befriend an African- or Native-American.

The bulk of this essay will address the many injustices, and elements of those injustices, that bicyclists experience.

Bicyclists as Minorities

Jensen describes how Irish immigrants had to struggle in the U.S. during the 19th Century to rise from being "minorities," hated almost as much as African-Americans, to members of the ruling class. For the purposes of illustration and comparison, one could say there was a hierarchy of "Whites,"

Irish, and African-Americans in those days (though of course there were many other minority groups). Today we could draw a similar hierarchy of street users: motorists, bicyclists, and pedestrians. Just as the Irish could take advantage of the fact of their Caucasian skin to help themselves overcome prejudice, bicyclists can take advantage of the fact that most states classify them as vehicle drivers (or the equivalent) to get along on our roads.

What happens when you're in the position of the being that middle minority is you can get pushed or pulled in either direction. The Irish could have aligned themselves with the African-Americans since they were both terribly discriminated against and hated during those years, but they really weren't given the choice. When it comes to putting food on the table and somebody else holds the key to the pantry, you do what you can to befriend the key holder.

Bicyclists are in a similar situation, but we have not collectively decided who we wish to ally with. This is because, for most people, bicycling is a discretionary activity. Many cyclists can choose to become motorists. The vehicular cycling proponents argue against special accommodation for cyclists such as paths and bike lanes, claiming that these facilities are like "bicyclist ghettos," making us into pedestrians-on-wheels (POWs?) At the other end of the spectrum are bicyclists who wish to be completely separated from motorists at all times. Most of us fall somewhere in between. No wonder planners, engineers and elected officials inexperienced with cycling have such a difficult time figuring out how to "accommodate" bicyclists.

Much in the way whites have made erroneous assumptions (some well-intentioned) about racial and cultural minorities, non-cyclists have made erroneous assumptions about cyclists. These assumptions are evident in their language, and lurking in this language are hints of paternalism and ridicule. We've all grown up with this language, so to many of us – cyclists and pedestrians -- these assumptions are accepted as natural laws.

The primary belief, held by most non-cyclists and even many cyclists, is that bicycling with motor vehicle traffic is difficult and dangerous. It's believed to be so difficult that it is beyond the abilities of the average person. Try this: if someone tells you that bicycling with traffic is difficult, ask him or her to explain why. Ask them to explain the knowledge and skills necessary for cycling with traffic that are beyond the abilities of the average person. Chances are good they will give you a blank stare, because they don't know. Yet somehow they "know" it's difficult. (The answers: knowledge – the same rules of the road as for motorists; skills – balance/steering, braking, scanning for and assessing speeds of approaching

vehicles, hand signals, looking over your shoulder for other traffic without swerving.)

The danger part is also rather peculiar. The assumption is that operating your bicycle as a legal vehicle on the roadway is what's dangerous. We all know that it is not the roadway that is dangerous, but time and again that is the statement made. "I won't bike on that road; it's too dangerous." Setting aside the matter of just how relatively risky a pursuit cycling in traffic is – after all, every human activity carries risk, including being a couch potato – the responsibility to reduce this danger is rarely placed in the hands of those who pose it. The road does not present the risk. A solo bicyclist on a road does not experience much risk (aside from steep mountain descents and other extreme situations). A bicyclist following the rules of the road in traffic does not pose a risk. The main thing that poses life-threatening risk is the human being operating the motor vehicle on that road.

What you are most likely to hear from a novice (or non) bicyclist is that it's scary. Who or what is making it scary? The design of the road? Of course not. The bike itself? Of course not. It's the speed and volume of the cars on the road and the behavior of the operators (and sometimes passengers) of those cars.

Manifest Destiny

"Traffic," in the language of bicyclist (or pedestrian) safety, takes on the characteristics of a force of nature. It's as though a stream of motor vehicles was a herd of bison or a flash flood, and not conscious, individual adult humans with morals and decision-making ability. There's no point in trying to control a wild herd or a flood, right?

Why this tendency to translate human responsibility into an uncontrollable force of nature? It should be obvious. They are the majority; they hold the power. It's in their interest to portray traffic – in the context of the motorist/bicyclist/pedestrian hierarchy – as something natural that cannot and should not be "unreasonably" controlled. It's quite reminiscent of the concept of Manifest Destiny.

We often describe criminal behavior as "sick." I believe this implies that such behavior is unnatural. After all, if such behaviors were natural, how could we in good conscience punish people for them?

Humans have been drinking alcoholic beverages and getting drunk for thousands of years. Animals have also been observed getting drunk on fermented fruit. So alcohol use is quite natural. Motor vehicle use has been prevalent for less than a hundred years. A high percentage – at least a third -- of pedestrian traffic fatalities and injuries involve intoxicated pedestrians. Many traffic engineers and law enforcement officers use this as an excuse to

do nothing for pedestrians. Only if a motorist is himself intoxicated is he severely punished for killing a pedestrian. Dennis Costello, a regular contributor to the Pednet internet list wrote:

The thing that the anti-drunk-driving people fail to understand is that the problem is not the drinking, it is the car! In the past, there was much less drunk driving because most people in urban areas lived within walking distance of a bar. Excessive drinking only produces drunks, while drinking and driving kills people.

7,326 fatality crashes were caused by intoxicated motor vehicle drivers in the U.S. in the year 2000, killing 16,653. 1,594 intoxicated pedestrians and cyclists were killed the same year. 25,168 people were killed in auto crashes that didn't involve drunk motorists; 5,429 of those were pedestrians and cyclists, and 3,835 of those were sober. So even though 50% more people are killed by sober motorists, and 40% more pedestrians and cyclists are sober than drunk, we focus on intoxication as the problem. If we'd totally eliminated alcohol use we still would have had over 25,168 driver and passenger deaths (over 3 per hour) and 3,369 pedestrian and cyclist deaths (over 9 per day) for the year.

If we'd totally eliminated motor vehicle use instead, we might have had a few dozen cases of drunken bicyclists killing pedestrians, and a few drunken bicyclists and pedestrians dying through their own incompetence. Drinking and walking, which has been done since man discovered alcohol, is characterized as irresponsible. Drinking while operating a motor vehicle is clearly much more dangerous to other people than drinking while bicycling, but the latter carries the same penalty as the former. Somehow drinking is the bigger problem than motor vehicle use. I can only surmise that people believe motor vehicle use is more natural and safe than drinking.

In June of 2002, Robert Noel, a lawyer whose dogs killed a woman in his San Francisco apartment building, was sentenced to the maximum four years in prison for involuntary manslaughter. He was not even present when the dogs attacked. They were under the control of his wife, Marjorie Knoller, who was convicted of the same crime that July. What kept Ms. Knoller from being convicted of second-degree murder was the lack of evidence that she knew her actions would have resulted in the other woman's death. In October of 1998, cyclist Ray Howland was struck and killed by a motorist who carelessly took a turn too wide and hit Ray as he stood on the paved shoulder waiting for his friends during the Mount Dora Bicycle Festival. The motorist, who saw the other cyclists approaching and knew that cyclists would be common on area roads that weekend (he was an area resident), was found guilty of careless driving and fined eighty dollars. Both the dog owner and the motorist had the responsibility to control things they knew had the potential to harm others. Both were being careless with

those things. Comparing these two cases one might conclude that carelessness with a massive, powerful dog is a more serious crime than carelessness with an even more massive, even more powerful motor vehicle. Owning and operating a motor vehicle must be more “natural” than owning and walking a large, aggressive dog.

Much as 19th Century American leaders terrorized and killed Native American tribes, justified their actions through Manifest Destiny, and then blamed the tribes for contributing to their own downfalls, motorists terrorize cyclists and pedestrians (especially when we get in their way while obeying the written laws), justify encouragement of still more and faster motor vehicle use through the construction of enormous parking lots and wider, more frightening highways (which bicyclists and pedestrians help pay for), and then blame cyclists and walkers for acting – out of fear for their lives -- in ways contrary to the rules of the road. Just as it did not require a majority of Colonists to terrorized and slaughter the Native American tribes, only tens of thousands of troops, it only takes a minority of motorists to terrorize bicyclists and pedestrians and discourage them from using the public roads. If only one-in-a-hundred motorists are rude to bicyclists, it will not take long for a cyclist to experience harassment.

If there were any Colonists who objected to the slaughter of native tribes, they kept fairly quiet and certainly had no impact on policies. Or if they did promote a policy it was one of shoving tribes into reservations; soothing their conscience while freeing up prime land for agriculture and logging. The same can be said for motorists. Bike lanes and paths allow motorists to feel they're being benevolent lords while at the same time getting cyclists out of the way so they can drive faster.

What's more, there are many cyclists who believe in this segregation. Why? Because they've been won over by motorist propaganda that says cycling with traffic is dangerous and have been threatened one-too-many times. Consider this quote from a post to the Florida Bicycle Association list:

“Claim the Lane” annoys motorists and further discourages people from bicycle commuting as it fosters further fear. If I owned a bicycle shop, I would be very concerned about the negative images this form of bicycle advocacy portrays....I will only donate to those organizations (like the Rails to Trails Conservancy) that promote safe, sane, responsible bicycle advocacy and who listen to the needs of the public. They want bike trails, lanes, and other conveniences.

Evidently one of our primary purposes as cyclists is to avoid annoying motorists. I replied, in part:

How does a citizen obeying the law while traveling on a public road portray a negative image? I wonder why one's liberty and safety should take secondary status to the desires of some motorists to pass.

Don't get me wrong. I like paths. They're often very pleasant places to ride. But they simply do not and will not solve the huge, over-riding problem – that motorists threaten bicyclists on a regular basis. Neither will bike lanes or paved shoulders remove the hatred. My brother was hit by a beer can thrown from a passing car as we rode on a paved shoulder. Evidently the occupants did not think it prudent to confront us directly. It was easier to drive off at 55 MPH, like Klansman driving off into the night after a cross burning.

It's also relevant to note that, like the Native American tribes, we were here first. Bicyclists were responsible for the first paved roads in America, and many inventions developed for bicycles were later incorporated into automobile design. Most European colonists would have died soon after arriving in North America if it hadn't been for their help of native tribes. As soon as the colonists got a large enough population and learned how to take advantage of the environment, they quickly over-ran the native population. As soon as manufacturers learned how to build a reliable vehicle (but still far less reliable than a bicycle) the rich started buying them. The rich of course always have the best access to political power, so motorists – in spite of operating a vehicle that was clearly a danger to others – were quickly given precedence over pedestrians, cyclists and equestrians. As this transfer was being made, some questioned the wisdom of allowing such vehicles to be sold and used. Here is an excerpt from *The Magnificent Ambersons*, the 1918 Pulitzer Prize-winning novel by Booth Tarkington:

"I'm not sure he's wrong about automobiles ... With all their speed forward they may be a step backward in civilization -- that is, in spiritual civilization. It may be that they will not add to the beauty of the world, nor to the life of men's souls. I am not sure. But automobiles have come, and they bring a greater change in our life than most of us suspect. They are here, and almost all outward things are going to be different because of what they bring. They are going to alter war, and they are going to alter peace. I think men's minds are going to be changed in subtle ways because of automobiles; just how, though, I could hardly guess. But you can't have the immense outward changes that they will cause without some inward ones, and it may be that George is right, and that the spiritual alteration will be bad for us. Perhaps, ten or twenty years from now, if we can see the inward changes in men by that time, I shouldn't be able to defend the gasoline engine, but would have to agree with him that automobiles 'had no business to be invented.'"

(The character George, referred to in the excerpt, was killed by a motorist at the end of the story. The Magnificent Ambersons was made into a movie, starring Joseph Cotton, in 1942.)

Eighty years later, the London organization "Take Back the Streets" echoes the Ambersons quote:

The street is an extremely important symbol because your whole enculturation experience is geared around keeping you out of the street. "Just remember: Look left, look right, look left again... No ball games... Don't talk to strangers... Keep out of the road." The idea is to keep everyone indoors. So, when you come to challenge the powers that be, inevitably you find yourself on the curbstone of indifference, wondering "should I play it safe and stay on the sidewalks, or should I go into the street?" And it is the ones who are taking the most risks that will ultimately effect the change in society.

The car system steals the street from under us and sells it back for the price of gasoline. It privileges time over space, corrupting and reducing both to an obsession with speed or, in economic lingo, "turnover." It doesn't matter who "drives" this system, for its movements are already pre-determined.

We can ride four-abreast on the reservation paths and the motorists won't care; we're out of their way. But ride four-abreast on the road and we become law-breakers and targets for harassment. If you leave the reservation you will be compelled to live within the terms of the colonists, but will still be harassed and ridiculed while you do so. Participate in a non-violent Critical Mass ride and you risk being beaten by law enforcement (this has happened and is documented) for the crime of delaying the important people in motor vehicles. Their time is more important than your time, your happiness, and your freedom to associate with your friends and neighbors while you ride.

Subspecies of Bicyclists and Where to "Put" Them

Earlier I said that cyclists have adopted (or been taught to accept) many "truths" about the nature of traffic and of bicycling with it. This is also true of bicycle planning, design, and education professionals. We speak in terms of "Type A, B & C Cyclists."

"A" cyclists are "advanced, proficient or professional" (does that mean you get paid to ride?) and can ride confidently in most traffic situations. "B" cyclists are novice adults who presumably have little more ability to ride with motor traffic than children. And "C" cyclists are children. "A" cyclists are sometimes characterized as "aggressive." We supposedly shouldn't design for aggressive "A" cyclists because they are such a small percentage of the cycling population. When I protested to a local consultant that I prefer the

term “assertive” he dismissed my argument as “semantics.” Really? “Aggressive” means I behave in a way that threatens others; “assertive” that I peacefully assert my basic right to mobility. Being aggressive when on a 30 lb. vehicle surrounded by faster multi-ton vehicles does not sound like a sane course of action. For a planner, engineer or politician, calling someone “aggressive” gives them justification to ignore that person’s needs and rights.

Supposedly these three “types” of cyclists need different types of accommodation. Funny, we teach the basic skills and traffic principles mentioned earlier to 9-year-olds. All cyclists need only one type of accommodation: the accommodation of all motorists to be polite, sympathetic and cautious.

I’m repeatedly told – by law enforcement, other motorists and other cyclists – that this change in cultural attitude toward cyclists will never happen. Or that it will happen after we’ve built a system of separate bikeways. How do we expect motorists to learn to get along with cyclists if at every opportunity we strive to segregate the two modes? Separate-but-equal didn’t work in the 1950s with race. As the Supreme Court noted, separate-but-equal was really only separate. Some bike advocates believe that bike lanes give “legitimacy” to cyclists. I don’t know about you, but I respect Native Americans as a group because they have a rich culture that we could all learn from, not because they live in reservations. And the many people who still hate Native Americans do so with the same intensity as those who did 150 years ago, in spite of this segregation into reservations. Why should motorists who hate bicyclists change their minds because the government gives bicyclists a special place to ride?

If I’ve got you riled up so far, hang on...

Duh Laws

There are two laws that govern the relationship between cyclists and motorists. We all know of both of them, though only the written one is consciously recognized. The written law was created by the National Committee on Uniform Traffic Laws & Ordinances and adopted by most states, including Florida. It’s called the Uniform Vehicle Code (UVC). Many states have made modifications to this uniform code over the years, but it’s mostly the same essential concept. This law is enforced by officers of the states, counties and municipalities. The other is the unwritten law enforced by many motorists as well as by some officers.

The written law was developed primarily by people – traffic engineers -- who wanted bicyclists out of the way. John Forester documented this very thoroughly in *Effective Cycling*. Florida is generally credited as having one of the more bicyclist-friendly statutes in the country. Our law (FS 316.2065)

defines bicycles as vehicles and says we have all the same rights as the drivers of other vehicles... "oh, aside from all these exceptions here in paragraphs five and six." The law, based on the UVC, uses vague language in explaining how far right one must ride, so vague that it takes five minutes to explain to someone what "as far right as practicable" means. Then it goes on to list some circumstances in which a cyclist may leave the right side. It's quite a paternalistic law when you think about it. I have a simpler version everyone could understand without legal translation:

Bicycles are vehicles. Every person propelling a vehicle by human power has all of the rights and all of the duties applicable to the driver of any other vehicle under this chapter, except as to provisions of this chapter which by their nature can have no application. A bicyclist shall move as close as is safe and practical to the right edge of the roadway to facilitate the passing of overtaking vehicles when the bicyclist considers it safe to do so.

If the law were written in such a simple manner, Kimberly Cooper and her attorney would not be spending hundreds of dollars in legal fees to appeal convictions for citations written for taking the lane on a St. Petersburg street. The lanes in question are 10 to 11 feet wide, clearly too narrow to be shared by motorists and cyclists. Yet the St. Petersburg Police Department and the Pinellas County court believe otherwise. The police never made the case that the lane was wide enough to share safely. (The burden of proof is supposed to be on the prosecution, right?) Who is better qualified to determine when it is safe for a motorist to pass a bicyclist: the motorist, a law enforcement officer, or the bicyclist? The answer is "the bicyclist" for two reasons. First is that the bicyclist is the more vulnerable roadway user; vulnerable not only to the impact with a motor vehicle, but also to potholes and other dangerous things on the pavement. Second is that the cyclist has more experience with being passed than the motorist (or officer) has with passing. In an average hour of cycling I'll probably be passed by over 100 cars, while during the average hour of auto driving I might pass at most one or two cyclists.

The rationale for the written law as it stands is that interactions on public roads occur between classes of vehicles and pedestrians, not between individual persons. Faster-moving travelers are presumed to be more important than slower-moving travelers. And of course bicyclists are also assumed to be "out for recreation" (not contributing to the economy). For the sake of "efficiency" it "makes sense" to limit bicyclists (a minority) in their use of the roadway so that motorists (the majority) are allowed to travel faster. Remember your grade-school civics lessons folks: matters of basic liberties are not decided by majority rule. I don't know about you, but I interact with other road users only one or two at a time. All the bicyclists using the roads on a day do not interact with all motorists who use them on

that day. Each cyclist interacts with a dozen or so motorists during each mile of her trip, and each motorist (in the Orlando area anyway) interacts with at most two bicyclists during an hour.

Like Native Americans who can no longer hunt on land that their ancestors hunted for generations because they were evicted from it by the United States government in the 1800s, bicyclists lost the ability to freely use an entire lane during the 20th Century. Just as Native Americans were described as children, so were bicyclists. It was for their own good, right?

The "two-abreast" part of the law is also discriminatory. (Imagine implementing it in China.) But there's a logical loophole in it that allows two-abreast cycling, or even more than two-abreast cycling, in most circumstances. The law says we are not required to keep as far right as practicable if the lane is of substandard width. (By the way, FDOT has clarified for the record that it considers lanes less than 14 feet in width to be substandard for the purpose of sharing between motorists and cyclists.) It doesn't say, "You can ride four feet from the curb instead of two feet when it's substandard." So you can ride two feet from the **left** side of the lane if you wish. We all know it is illegal for a motorist to pass on the right in this circumstance, so tell me, what does it matter from a practical perspective if there are one, two, or even three other cyclists to the right of the first cyclist? The motorist's ability to pass is unaffected. On most of the rural roads club cyclists and racers use the lanes are only 10 to 12 feet wide, fitting the criteria for a substandard width lane. So any individual cyclist has the right to use any part of the lane. Let's say a pack of 50 cyclists is traveling such a road. Which is safer: for the cyclists to all hug the white line, single file in a paceline that would stretch at least 400 feet, which would take a motorist about 10 seconds to pass (risking a sideswipe all the while because he'll try to squeeze by even when there are oncoming vehicles); or for the pack to ride four-abreast, taking up only 100 feet of length and requiring only about 3 seconds to pass? And please don't tell me we shouldn't travel in large packs:

"Congress shall make no law ... abridging... the right of the people peaceably to assemble."

Hundreds of employers can choose to open and close their businesses at the same time, encouraging thousands of motorists to individually take to the roads during the same period, causing widespread congestion, deaths, and billions of dollars in injuries and property damage, and the community responds by throwing millions and billions more at the "problem" to enable even more businesses and motorists to continue an insane system. But if thousands of cyclists think it would be fun and would make a neat political statement about the way our public streets are used, and to gather one Friday evening per month and ride in a large, non-violent mass for a couple

hours, adding minor delay to the street system – it's time to call out the cops in riot gear and bust some heads.

Then there's the unwritten law. It's based on ridicule, an attitude of superiority, ignorance or disparagement of the written law, and the ability to flee the consequences of antisocial behavior. If it were written it would say:

Stay out of our way or we will scare the crap out of you, hit you, or maybe even kill you.

This unwritten law is the one that has the greatest impact on bicyclist behavior. As I said before, this law does not have to be enforced by many officers or self-appointed deputies to be effective. My wife was a victim of this vigilante justice system. A motorist threatened her, hit her with a lit cigarette that burned her arm, tried to get her to run into the rear of his vehicle by slamming his brakes, and finally got out of his vehicle, stepped in front of her, grabbed her handlebars, stopped her and threatened her some more. Fortunately an off-duty sheriff's deputy saw the incident and gave the motorist a stern talking-to. He didn't call the city police department to come pick this guy up for assault, though (it happened in the city and was out of his jurisdiction). Why not? He told my wife that, while he understood that cyclists have the right to use the roadway, such treatment was to be expected.

Imagine if she had been a black woman walking down the sidewalk and assaulted by a white man walking the same sidewalk. Is such treatment to be expected?

Florida Bicycle Association board member Duke Breitenbach was struck from behind by a motorist a few years ago in Lake County. The driver had already passed three other cyclists not far behind him. The motorist claimed Duke had swerved in front of him (of course) even though there was no reason for Duke to have done so; no crossroad, no driveway, no debris. It was a four-lane road; the motorist had an entire second lane in which to pass. The Florida Highway Patrol officer who worked the crash visited Duke in the hospital and told him he believed the motorist's story, not that of the four cyclists. Furthermore, he told Duke he felt that bicyclists were a nuisance.

Let's make a fictional comparison to Duke's story with a different cast of characters. A white man trips a black man as he's walking out the door of a store because the black man had the nerve to buy the last six-pack of Budweiser at the only open store in town. The black man falls hard (his hands are full) and breaks his arm. The white guy tells the police it was an accident, while three friends of the black man saw it happen and describe it as intentional. The cop visits the black man in the hospital and says he

won't arrest the white man because he believes his story. "Why don't you just leave town, boy."

A Florida Highway Patrol officer once told me, when I suggested that the pedestrian's right-of-way should be respected and enforced at marked and unmarked crosswalks at unsignalized intersections (as spelled out in Florida law), that that must not be done because, "I'm not going to stop all the traffic on SR 436 because some guy wants to cross the street to get to the Wendy's for a Frosty."

Most traffic engineers believe pedestrians should walk hundreds of yards (along sidewalks barren of trees, in the sweltering Florida summer) out of their way to cross at signalized intersections. Why? Because in order for motorists to realistically be able to yield to pedestrians in crosswalks at unsignalized intersections (as the law already requires), they must travel at 25 to 30 MPH. The Motorist's Manifest Destiny belief says this is unnatural.

Let's also remember that the engineer's rationale that the majority should be given priority gets tossed out the window when bicyclists become the majority. This is true not only on rural roads, but on shared use paths and in cities where bicyclists far outnumber motorists, such as in China.

In the early 1990s, then Florida DOT pedestrian and bicycle coordinator Dan Burden was invited by the Chinese government to go there and help address some of the problems they were experiencing with the huge numbers of bicyclists in their larger cities. Thinking their purpose was to find better ways of accommodating cyclists, Dan went eagerly. When he arrived he learned that the "bicycle problem" was that there were too many of them and that they were impeding the handful of motorists. Dan said, "Sorry, I can't help you." (Meaning "I won't help you.") Of course this would not happen in the U.S.; that many cyclists would exhibit a clear block of voting power.

Or would it? Take a trip on the Pinellas or West Orange Trails and you'll see that the paths, which can carry 1,000 to 5,000 vehicles (bicycles) per day, are made to stop for cross streets that carry only a few hundred vehicles per day, and even for driveways. This is in clear violation of the engineering community's own manual on traffic control. The message is clear: people in cars are more important than people on bicycles, even when they are the minority.

Act Up

We are ignored and despised and threatened and injured and sometimes even killed because we are "different," because we are believed to "take resources" from motorists, because we are believed to be doing something childish, or worse, inherently dangerous and therefore foolish, because those who despise and threaten us are not held accountable, and because

carelessness behind the wheel of a motor vehicle that results in the death of another is not considered to be a serious crime because it is "inevitable."

We need to destroy the belief that bicyclists are "different." We can do this by celebrating bicyclists as individuals, telling our stories, and showing how we contribute to our communities.

We need to destroy the belief that bicyclists take time and resources from motorists. We can do this by showing that we contribute more than we "take" -- through our stories.

We need to destroy the belief that bicycling among motorists is inherently dangerous. We can do this by cycling conspicuously among motorists.

We need to destroy the belief that despising, harassing, or threatening bicyclists is acceptable. We can do this by shaming and ridiculing those who express such thoughts. Tell them, loudly and in public, "You should be ashamed of yourself." Then tell them why.

We need to destroy the belief that deaths and injuries of cyclists due to motorist carelessness are inevitable. We can do this by characterizing such carelessness as the equivalent of being careless with a gun, careless with poison, careless with dynamite, or careless with a large, vicious dog.

We have made some progress with cycling in this country over the past ten years. Money is flowing toward bicycle programs and accommodation. Our public health agencies are beginning to recognize cycling more as a solution to our sedentary lifestyles than as a safety problem. But we also have fewer children cycling to school, we still hear stories of motorists who intentionally injure and kill cyclists, and we still are harassed by motorists on a regular basis. Even though our interest is in an activity that many Americans enjoy and that also imparts many benefits to those who choose not to bike, we still are treated by many policy makers as a "special interest group." Those of us who drive bicycles know it is special, in a very good way.

***Postscript:** Cyclist and cycling researcher Wayne Pein wrote me after reading this piece and argued that my comment in the last paragraph about money for "accommodations" was in contradiction to my position about segregation. I don't believe it is. Every solution we attempt in life includes both good and bad outcomes. Wisdom involves understanding both the good and bad, weighing them, and determining the best course of action. The argument should really be whether the good outweighs the bad. And sometimes bicycle facilities **do** provide more good than bad. Admittedly, many planners, engineers and politicians don't understand the issues well enough to make wise decisions. My job is to help them understand.*

The System in the Faraway Land: A Parable

Once upon a time the people of a faraway land put into place a massive and glorious system, the purpose of which was to move the people around quickly and make everyone very happy and wealthy. It was a very rational system and built with the most advanced technology. It required enormous amounts of natural resources, so much that the faraway land had to gather resources from other lands. (Sometimes they had to send their army to get the resources.)

Because the system was so wonderful, people were discouraged from going about in their natural way. They had to use the new way. Well, actually, they didn't *have to*, but it was awfully unpleasant if one didn't use the system, and it got more and more unpleasant as the system grew.

When people tried to go about in the natural way, they had to make way for the people in the system's machines. At some special places the people in the system machines had to stop for the few people not inside machines, but the machine operators didn't always follow the rules, and those special places were few and far between. So the people who went about in the natural way just made do as best they could. Sometimes they'd get hit by the system's machines and get badly hurt or even killed.

Some people tried to get around on smaller machines, but the rulers of the system didn't really care for them. They didn't go nearly as fast as the system's machines. Since the system's machines were very big and very fast, most of the people on the little machines were afraid of them, although there were a few little-machine people who figured out how to travel amongst the system's machines without getting into too much trouble. The newspapers told stories that made it seem as though traveling on one of those little machines was very, very dangerous, but it wasn't really all that bad as long as one followed the rules.

But boy, it sure was unpleasant some times. Some of the people in the system's machines would yell nasty words at the little-machine people for no good reason.

But most everyone cheered the system.

Every year the system got bigger and bigger.

Every year it ate up hundreds of square miles of forests and farms to make room for the machines of the system.

Every year it put lots and lots of gassy stuff in the sky that would make the world warmer.

Every year it put lots and lots of other gassy stuff into the sky that would make people sick, or even die.

Every year it put lots and lots of hard stuff in big, big piles around the cities. This stuff wasn't like wood or leftovers or poop; it would sit there for hundreds, maybe thousands of years, and not break down into dirt like most natural stuff does. Sometimes it would poison the water.

Every day the grown-ups in the faraway land spent an hour or two in the system, and spent a few more hours working to pay for their part of the system. But that was okay, because the purpose of the system was to make them all happy.

Most everyone cheered the system.

The system had lots of rules, but most people just followed the rules that they thought made sense. Besides, the police only had time to catch a small handful of the people who broke the rules.

Every year the system killed about 10 million wild animals. That was sad, but the people said, "There's nothing we can do about it!" Slowing down the system so the animals could get out of the way didn't seem to occur to them.

Every year 2 million people would be hurt using the system. Some of them would be hurt so badly that their lives were not so happy any more.

Every year 40,000 people died using the system. It became clear to some people that something must be done to fix the system. Every year the people who ran the system would say, "If only..."

"If only people would always follow the rules..." But it seemed no matter what they did, there were *more* people *ignoring* the rules every year.

"If only we could make the system bigger, then everybody would be happy." But they never were. The bigger they made the system, the more people used it.

"If only the machines for the system could be made safer." And surprise! they were! But it didn't seem to matter; it seemed that as the machines got safer, the people operating them just got more careless or reckless, so just as many people got hurt or died.

It got so that quite a few people were getting upset about the system, but they were told that most everybody really liked it, so the system should keep growing to make them happy.

Those few people who were upset with the system said: "Can't you see? It's so obvious! As the system gets bigger and bigger and faster and faster, more and more bad stuff goes into the sky and more and more people and animals get hurt and killed! You know, come to think of it, we can't imagine a *worse* system!"

The rulers of the system seemed not to see this. Or at least they would not admit they did. Or if they did, they would say, "Don't worry; we can fix it! We're the experts!" But they just kept doing more of what they had been doing, with just little changes that didn't make much difference.

Some people came up with a different idea: "What if we made some places where people could get about in the old, natural way more of the time and not feel so afraid of the system's machines?" They even made some places like that, and they were pretty nice. But most places stayed part of the same big, fast system, and they would stay that way for many, many years.

So every year more forests and farms were destroyed, more nasty stuff went into the sky, and more people and animals died. But the system made so many people happy that it was ... well, it was just unfortunate. The most important thing was to make the system *Bigger* and *Faster*. Slowing it down was very bad.

Here is a pair of stories from the faraway land that shows how bad it was to slow down the system.

In the first story, a man operating one of the system machines was careless one day and ran into a man driving one of the little machines that the system rulers didn't much care for. The man on the little machine died. Everybody agreed the man in the system machine made a serious mistake and should pay for it, but they also cried because it was so sad, because the careless man was really such a *good person*. He wasn't made to feel like a criminal; he wasn't arrested or anything like that. The judge made him pay about one day's wages. Then he could go back to operating his machine, because one could not be expected to have a good life without one!

In the second story, hundreds of people gathered once a month on their little machines and traveled around together. Sometimes they joined up because they wanted to shake their fists against the system and show people how stupid it was. Sometimes they just wanted to have fun. They felt much safer in the big gatherings.

They broke some of the rules as they traveled, but hardly anybody ever got hurt during these gatherings, and if they did it was just little scrapes. But their gatherings messed up the system; they slowed it down. The people in the system's machines got really angry, even though they had comfy chairs and full stereo surround sound systems in their machines. They didn't mind going slow so much, it was just that they really, really *hated* going slow when the people on the little machines got in their way.

Even though the people on the little machines didn't hurt anybody, the police came along and got really mad. They beat up some of the people on the little machines and even threw some of them in jail and took their little machines away.

The newspapers said the people on the little machines were very bad, because they were slowing down the system. But that seemed silly to some little-machine people. The system slowed down all the time *without* the little-machines getting in the way. It was so busy that the slightest little thing would slow it down.

Other little-machine people actually agreed with the rulers and supporters of the system. They agreed that the system was more important than the happiness of their fellow little-machine people.

It seemed so unfair! One of the system's machine operators had killed somebody, but everybody said he was such a nice guy, and he should just get punished a little bit for making a mistake. On the other hand, the police and the newspapers and the town leaders said the people on the little machines were very, very bad, even though the only thing they did was slow down the system. And they didn't even hurt anybody! It was as though the system was more important than the people!

It was very strange. Everybody knew about all the bad things the system did, but most everybody said, "Make it bigger! Make it faster! And get those little-machine people out of the way; they're the problem!" Because they believed that only by making it bigger and faster would the problems be solved. If anybody said the system should be made smaller and slower they were laughed at.

It was as if the people of the system were under a spell so that they couldn't see the problem.

Perhaps one day the spell will be broken.