

How to Transition from the Car Culture to the Bike Culture Paradigm

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Americans have become very accustomed to a life of convenience and leisure. Since the early 1950's, American culture has revolved around the use of the car for personal transportation. The automobile, while offering unsurpassed individual mobility, is also one of the most inefficient forms of transportation. In the future, more people will rely on the simplicity of the bicycle for personal transportation. This essay explores the issue of why this transformation will be a monumental undertaking and why people should consider bike commuting now, by addressing four primary advantages of bicycle commuting: environmental degradation/resource intensiveness, national/economic security, national/personal fitness, and some effective steps towards a commuter bike lifestyle.

Environmental Degradation/Resource Utilization

Automobiles have arguably had one of the most dramatic effects on our society; however, they are also the single greatest cause for much of our current ecological dilemmas. Thousands of people are killed every year in auto accidents, and millions more are seriously injured. Automobile pollution accounts for a large degree of the increase in global warming. Overwhelming scientific opinion agrees that irregular species migration and extinction resulting from global warming is caused by excessive emissions from automobile usage. Over 90% of our transportation energy comes from fossil fuels, and the US currently imports over 50% of its oil consumption. The U.S. comprises less than 5% of global population, yet it consumes over 25% of global oil production. We have become accustomed to a specific type of lifestyle, and in particular one of convenience and opulence.

Bicycles on the other hand, are diametrically opposite of automobiles in terms of resources required for manufacture, without the environmental side effects from operation. Bikes are also much easier to maintain than automobiles, typically costing no more than about \$100 per year. Compare this to maintenance for automobiles, which depending on the make and model can often run thousands of dollars per year. While all bikes and bike parts are manufactured from resources that require the use of fossil fuels in the manufacturing process, the amount of raw materials necessary to manufacture a bike is a fraction of that required for even the smallest automobile. This is part of the reason why bikes are so much more efficient than cars, because they are much simpler to own and operate. The reason for their lack of mass appeal is largely due to the stigma of using one's own physical energy to provide transportation, and the fact that physical exertion often results in perspiration. While some perspiration is most often unavoidable, there are methods for alleviating the exertion. Dislodging this paradigm from the American psyche will be a key element of reducing our dependence on fossil fuels. Changing the way people look at bikes is the first step away from car culture, towards a more sustainable emphasis on bike culture.

Getting more people to accept the bicycle as a viable form of transportation will likely require a massive cooperative educational campaign between the bicycle industry, environmental and consumer groups. Our elected national leaders are completely beholden to the fossil fuel and auto industries, and cannot be counted on to act in the best interests of the citizens. In all likelihood, many organizations will have to make a concerted and cooperative effort to educate Americans as to the value of providing one's own power for personal transportation; as well as the environmental benefits from reduced CO2 emissions.

National/Economic Security

Biking is more than just a mode of transportation; it also brings freedom, independence, self-sufficiency and confidence. Individual mobility through a self-propelled means of transportation is not only environmentally friendly, it is also a very healthy way to live. Additionally, biking is a very patriotic form of transportation because it reduces our dependence on fossil fuels and foreign oil in particular. Reducing our dependence on foreign oil is very patriotic, because it reduces the need to send the military into hostile regions in order to secure natural resources in our 'national interests.' Patriotism is more than just hanging a flag on your house or putting a bumper sticker on your car. Additionally, the combustion engine is less than 50% efficient; so much of the fuel that is used to produce energy is wasted through latent heat.

Our dependence on foreign oil increases the wealth of a few individuals to the long-term detriment of society as a whole. Once fossil fuels become excessively expensive for the average middle-class person, transportation will become increasingly more difficult and complicated. The viability of hydrogen fuel cells is still largely unsubstantiated, if not an outright fallacy, while other fuel types such as ethanol and bio-diesel are not long-term solutions. Individual mobility will become an increasingly expensive endeavor within the next five to ten years.

Bikes require a fraction of the amount of fossil fuels necessary to operate a typical automobile, because the majority of the required energy is supplied by the operator. Although there are disadvantages to commuter cycling including longer commute times and personal safety, these are issues that can be adequately addressed with preparation.

National/Personal Fitness

Obesity in the United States today has reached epidemic proportions. An estimated 33% of adult Americans are overweight and childhood obesity is nearly an epidemic. It is becoming a serious drain on our national health care system, not to mention worker productivity. We now have an inordinate amount of free time with which to pursue leisure activities. We have a myriad of choices for nutritional purposes and the selection runs the gamut in terms of price and quality. Needless to say, many people do not always make the most appropriate choices. For too many people, using the remote control is considered physical exercise.

All people have a responsibility to maintain their physical health, not merely for moral and spiritual reasons, but also societal reasons as well. The cost of health care in the US is largely driven by unhealthy lifestyles, because poor health quality results in a greater risk of accidents and disease. As individuals, we owe it to ourselves, our community, and our country, to try to achieve optimum physical health.

Effective steps towards a bike commuter lifestyle and culture

The easiest way to achieve a sustainable bike culture is through individuals taking baby steps towards a bike commuter lifestyle. Although it barely took a few decades to become addicted to the automobile, we realistically don't have even half as much time to wean ourselves from that addiction. Few are capable of an immediate lifestyle overhaul, and even the most committed and self-reliant individuals would find it much easier to begin by gradually shifting away from their use of automobiles toward bicycles. Taking an all-at-once leap towards a commuter lifestyle could be self-defeating and demoralizing. A gradual approach to commuting would be much more effective, by taking one or two trips per week, and then increasing the number of trips and the distance per week. Gradually increasing the distance and number of trips per week rather than all at once will result in a more successful, and enjoyable commuting experience.

Some of the most important things an individual could do to make a smooth transition to a bike commuter lifestyle include: attending a commuter cyclist workshop sponsored by a local bike shop; having a bike shop fit you for the most appropriate type of bike for the purposes of the rider; setting up a system to carry personal items on the bike; and most importantly, starting out gradually.

Many local bike shops offer bike-commuting workshops to help the newly converted ease into a commuter lifestyle with tips on riding techniques, traffic laws and equipment. More discussion on useful equipment will follow but it is important to practice solid bike handling techniques in traffic as well as knowing the rules of the road. Even if you don't purchase a new bike, most bike shops will fit you for a bike to determine what size bike is best for you. Finding a bike that fits the rider properly is paramount to ensuring many safe and enjoyable rides. There are numerous web sites that post pre-owned bikes for sale and there is always the possibility of picking up a good used bike at a rummage/garage/yard sale. A bike map is a very useful item for those who are new to an area or anyone who is not familiar with the bike routes and traffic patterns. A map is useful for determining commuting routes as well as which streets are best to avoid.

Purchasing appropriate and comfortable clothing for the time of year and prevailing climate is not a necessity, but it does make long distance commuting more enjoyable. Many people actually commute to work in suits and dress clothes, so realistically all that is needed is the bike and maybe a velcro ankle strap to keep clothes out of the front chain ring. How much equipment is needed is a personal decision and is different for everyone. It depends on how far the commute is, the terrain and the climate and what the rider is comfortable in wearing. It is extremely important to be comfortable in order to make commuting as enjoyable as possible. Bike lights and reflective tape are also a necessity

for early morning and evening cycling. A helmet is mandatory by law in many communities around the country, but it also makes good sense because although biking is one of the safest physical activities available, the chances of head injury are greatly reduced by wearing a helmet.

Cycling is an exhilarating and adventuresome way to become physically fit, while simultaneously resolving the issue of personal transportation. No other mode of transportation, other than walking or running, affords one the opportunity to stay healthy while at the same time traveling to home, work, or running errands. A large percentage of driving that Americans engage in involves personal leisure activities or short trips to run errands or trips to the grocery stores to obtain one or two items. By outfitting one's bike with panniers it is possible to accomplish two things at once: run errands to the store, library, post office, etc; and stay physically healthy at the same time.

Transporting items by bike is easier with saddle-bags, more often called panniers, which carry clothes, food, books, etc, while leaving the hands free to handle the bike. Five gallon buckets can also be modified to fit on to a bike rack. Bike trailers are another option for increasing the amount of packages or goods that may be transported using a bicycle. Teams of cyclists have often moved people to new residences in the Portland area, using bicycles as the primary transportation mechanism. Bike fenders during rainy seasons increase the enjoyment and comfort of bike commuting by keeping road splash from spraying all over the cyclist.

The most important way to have an enjoyable commute is to have a safe commute. Having a safe commute involves a few basic techniques. The first is to ride in a predictable manner, by not swerving frequently or maneuvering erratically. Using the bike lane or riding on the right side of the road and not riding against the flow of traffic is also extremely important. Riding in a timid fashion can be more dangerous than riding assertively. This doesn't mean challenging a quarter ton of steel, but motorists have more respect for the cyclist that has a smooth riding style. It should go without saying that observing traffic control devices and road markings is obviously essential to having a safe bike commute. Knowing the rules of the road is important to continued biker safety.

A transformation from car culture to bike culture will likely take decades, as reticence to such dramatic change is formidable. Automobiles are also unquestionably part of the American landscape for years if not decades to come. So any changes in the transportation landscape in the US will not likely happen anytime soon. However, with the peak of global oil production looming on the not too distant horizon, it is clear that the age of the combustion engine is nearing an end. What will replace it is much less clear at this point. Hybrid vehicles are still years away from mass production in the U.S., and Japan is still in the process of ramping up production. Whether or not the U.S. can even generate sufficient electricity to power millions of electric vehicles in addition to its insatiable need for electricity for other devices remains to be seen.

Obviously, the impact of millions of bicycle commuters on the demand for imported foreign oil would be dramatic. It also stands to reason that the oil companies would

rather not see a paradigm shift because it would likely mean a substantial decrease in their overall profits. Demand for oil is already beginning to outstrip a depleting supply, and is projected to continue to do so; but the answer to a large part of our dilemma lies in the simplicity of the bicycle.

[Editor's Note—I did not start driving a car until I was well into my 18th year. And even since then I have logged in many thousands of miles on bicycles, both commuting locally and traveling around the U.S. and Canada.

One thing I have I have noticed about bicycle commuting is that it can be more sociable. It allows for more opportunity to interact with the community and the environment. In a car, one is isolated from everyone and everything around her or him, confined to roadways and even placed into competition with other drivers. Automobiles have helped to atomize society. Conversely, I am sure that a change to bicycle commuting would help to foster a social rebirth.

On another note, I would welcome advice on bicycle commuting in northern regions where temperatures can drop below zero and snow pile up three feet deep.]