

The Automobile and Gender: An Historical Perspective

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INTRODUCTION

GENDER STEREOTYPING AND THE MODERN AUTOMOBILE

Many have observed that when men get lost while driving they will seldom stop to ask for directions, while women who are lost will usually pull into a gas station or convenience store or ask a passerby for directions. This supposed gender-linked trait may be an example of simple folk wisdom and may be real or imagined, but it was recently taken very seriously in an open piece by Robyn Meredith in **The New York Times** on August 26th. The article dealt with the emerging technology of intelligent transportation systems, and described some newly available automobile navigation systems and several others that are still in development. The article reported some findings that should be of interest to those of us attending a conference on Women's Travel Issues.

Meredith concluded that on-board navigation systems are useful because men will prefer them rather than to ask for directions. The article quoted Sociology professor Pepper Schwartz of the University of Washington, who stated that in "nine out of ten feminist households, men do most of the driving," and "men find it hard to ask for help because it is a submissive gesture." Support for this position was offered in the article in the form of interviews with technical experts attending a national conference on in-vehicle navigation systems. Professor David E. Cole of the University of Michigan, for example, was quoted as saying that he personally did not need to stop at gas stations for directions because he always brought along a compass.

The article goes on to quote Stephen E. Weilland, an expert on car navigation systems, who supported the development of in-vehicle navigation systems by saying said that sending his wife into a gas station for directions was pointless because she would only misunderstand them."

The article also stated that German engineers, responsible for designing a Phillips on-board navigation system for BMW cars, have concluded that the talking computer that will give directions in future BMWs will have a male voice. Mr. Francis J. Dance, who demonstrated the Phillips system to the reporter, was quoted as saying that the technical decision had been made to use a male voice because "men don't want women giving them directions" (Meredith, 1996).

THE PLACE OF HISTORICAL ANALYSIS AT A CONFERENCE ON WOMEN'S TRAVEL ISSUES

This is a partly humorous and partly serious contemporary example of the influence of gender on travel and transportation systems. As we undertake the Second National Conference on Women's Travel Issues, it is important that we consider the depth and the significance of gender issues in transportation. It would be a terrible mistake to conclude that this conference is only about small differences in vehicle ownership rates between men and women, recent trends in vehicle miles of travel as they differ between men and women, or mathematical models in which gender is one of several independent variables. All of our technical analysis, statistical modeling, and hypothesis testing is really derived from an overarching concept of gender that we should remember to be simultaneously both the cause of and the effect of what we measure in our individual technical studies. We should take note in this opening session of the fact that "gender" is a socially constructed concept. Gender is

very much not the same thing as sex. We are born as males or females, and that's a start at gender but it is surely not all there is to it. Our society, through family, educational institutions, religious institutions and many other social organizations and conventions, attaches to us certain expectations, imbues us with certain roles and behaviors, ways of dressing, ways of speaking, ways of acting, and even ways of traveling. We learn these social roles and teach them, and in the process we create expectations regarding gender. This is true in the realm of travel as it is true in other aspects of our lives.

Economists say that "the demand for travel is a derived demand." That is often taken to mean that we usually travel not for the sake of traveling, but rather because our activities are separated in space and time, and we need to travel in order to participate in a wide range of activities such as work, recreation, and personal business, at times and locations that are separated from one another. This is certainly true, and we can even go farther by saying that the demand for travel is in part derived from social roles that are gender related. The different social roles played by men and women dictate that they travel with different frequencies, at different times, and by different modes.

As we discover these differences by conducting technical studies of the sort that will be reported over the next three days, let's also recognize that these are derived from larger social constructs associated with the concept of gender. Indeed, I would assert that travel patterns are among the most clearly "gendered" aspects of American life. If that proves to be really true, then one of the best ways of finding out about the significance of gender in urban life would be to study travel patterns more explicitly with this issue in mind. And, if this contention is true, is would also be essential to include far more gender-related analysis in our standard study of travel patterns.

GENDER AND AUTOMOBILES IN THE EARLY TWENTIETH CENTURY

During the last century, as the industrial revolution reached more and more people and an increasing proportion of the population began working at places outside of their homes, men and women increasingly came to exist in what historians and social theoreticians have called "separate spheres." While men and women may have worked together on their family farms, with urbanization and industrialization man's arena was increasingly defined as economic production and public life (such as politics or scholarship) and was pursued outside of the home, while woman's sphere was the care of children, the nurturing of the family, the comfort and tranquility of the home, and the moral guardianship of family and religious values. Through the nineteenth century home became more than a unit of economic production. Increasingly it became the ideal of goodness and morality, it provided material comfort and status, and it became increasingly identified as the domain of women far more than of men (Degler, 1980; Wachs, 1991).

The separation of man's sphere from woman's sphere was at least in large part a direct response to advances in transportation technology that took place in the second half of the eighteenth century—from horse cars on rails to electric cable cars and street cars to suburban railway systems and finally the automobile. These innovations made it increasingly possible for more people, mostly men having higher than average income levels, to live and work at locations increasingly distant from one another. People of means wanted their workplaces separated from their residences in part because of the different values that the two represented. It was believed that the aggressiveness and turmoil of the world of work—man's world—should not be permitted to intrude into the peace and tranquility of home—woman's sphere. The density, smoke, and filth of the world of commerce should not be allowed to tarnish the warmth, protectiveness, and pleasantness of the home and the best way to

achieve this was the increasing separation of home and work in space. This counterposition of values is seen in a quotation from Charles Horton Cooley, who wrote in 1884 that:

Humanity demands that men have sunlight, fresh air, the sight of grass and trees. It demands these things for the man himself and still more earnestly for his wife and children. No child has a fair chance in the world who is condemned to grow up in the dirt and confinement, the dreariness, ugliness, and vice of the poorer quarter of a great city. There is, then, a permanent conflict between the needs of industry and the needs of humanity. Industry says men must aggregate. Humanity says they must not, or if they must, let it be only during working hours and let the necessity not extend to their wives and children. It is the office of the city railways to reconcile these conflicting requirements (Cooley, 1894).

Advances in public transit allowed some people to realize their preference for separation between the locations of home and work, and the automobile enabled even more people to do so. Suburbs, at first very close to the center of the city, and later at substantial distances from the center, were the manifestation of this preference in terms of urban form. While transportation planners often describe suburbanization as an inevitable outcome of transportation improvements, we don't often take note of the fact that suburbs also separated gender roles in space. The commerce and politics of the inner city were for a very long period of time the exclusive domain of men, while the residential life of the suburbs, including shopping and caring for children, was very much the sphere of women.

Society women before 1910 drove for recreation quite as freely as wealthy men—they were called "chauffeuses," but their circumscribed social roles were evident in their driving patterns. They drove downtown more rarely than men, typically staying within their suburban communities, driving to social events, shops and school functions. And, as Virginia Scharff has shown, the electric automobile was clearly marketed to women in recognition of women's particular roles.

Today as we consider the potential market for electric vehicles as a way of addressing air quality and energy policy issues, we hardly pay attention to the early years of the automobile, before about 1912, when electric vehicles were very common and there was genuinely vigorous competition for market share between manufacturers of electric cars and gasoline powered vehicles. The scholarship of Virginia Scharff looks closely at this competition and her work makes it very clear that gender roles were consciously addressed in this competition. The gasoline powered car early in this century was seen to be powerful, it was noisy, it was faster and had greater range than electric cars and starting it required turning a crank. The electric car, by contrast ran more quietly, more slowly, more cleanly, had limited range, and started at the press of a button or turn of a key. It turned out that the early gasoline powered car was widely marketed as being more attractive to men, while the electric car was primarily marketed as a vehicle whose characteristics made it attractive to women. In an article in a popular magazine of the time, Country Life in America, for example, author Phil A. Riley urged his readers to understand that the two types of cars were distinctly different from one another. He described electric autos as perfectly suited to the needs of women who traveled shorter distances, stayed nearer to home, and who needed an "ever ready runabout for daily use," leaving extended travel and fast driving to the men in gas powered cars."

Another popular author of the period, C. H. Claudy (as quoted in Scharff, 1991), also promoted electric vehicles as appropriate for women. He actually stated that the electric car was suited to women because it had "a circumscribed radius," and he described how this was appropriate for the accomplishment of domestic tasks that were part of a middle-class homemaker's lifestyle. Of course, he regarded the

activities of a homemaker as inconsequential in comparison with the obligations of professional men. "What a delight it is, he stated, to have a machine which she can run herself, with no loss of dignity, for making calls, for shopping, for a pleasure ride, for the paying back of some small social debt." A gasoline car in the early days needed to be started by turning a crank. It was stated over and over again that cranking an engine was no job for a lady, and the electric cars had the advantage of starting at the touch of a switch. Cranking a gas-powered car could break an arm if one failed to let go immediately and the car backfired. In fact, cranking did not require great strength. The key to properly crank starting a car was in sensing the right position at which to hold the crank when accelerating the speed of rotation. Women were quite as capable as men when it came to crank starting a car, and the notion that women could not or should not do this was promoted pretty much by men.

The power of the association between gender and the source of power of automobiles early in this century is most clearly symbolized in the fact that in the year 1908, the year in which he introduced the Model T Ford to market, Henry Ford bought an electric car for his wife Clara. Ford biographer Allan Nevins mentioned that she used the electric car for short trips around Dearborn, but that she would ride as a passenger in a car driven by Henry or their son Edsel when making longer trips. The gender roles are clearly established: Women's independence was limited and well matched by electric cars. When their lives took them farther afield, it was in the company of men and certainly not alone.

It is clear that many women sought and enjoyed the independence provided by the automobile and welcomed the opportunity to travel. Many books appeared presenting accounts of women's trips across country without men. For example, the first commercially successful book published by Emily Post, who later became a well-known authority on etiquette, was an account of her cross country journey in an automobile (Post, 1916). My favorite book of this genre was republished in 1983, and is rather widely available. Entitled **Travels with Zenobia**, (Zenobia is the name of an automobile): provides a detailed account of a trip by two American women from Paris to Albania in a Model T Ford, in which all their mechanical ingenuity is presented in their own words. One of the two authors, by the way, was the daughter of Laura Ingalls Wilder, author of the "Little House on the Prairie" series (Lane and Boylston, 1983).

The story of Alice Huyler Ramsey is an instructive one. She was an automobile adventuress, who first became famous by driving across country with three women passengers in a Maxwell-Briscoe Model AA, a gasoline powered car in the low-to-medium price range. This was part of a promotion to sell this type of car to people of modest means for use in their everyday lives (Scharff, p. 81). Soon, Ms. Ramsey was capturing headlines by frequently defeating men in races at county and state fairs, and on the streets of cities. Before long, she was banned from the associations of race car drivers, which from that point onward, only admitted men to membership. Though banned from many national competitions, for more than twenty years Alice Hyler Ramsey was a frequent participant in challenge races against men, winning frequently yet being systematically excluded from the fraternity of auto racers.

When World War I became the dominating event of its era, young women of means, graduates of Vassar and Wellesley, some trained as nurses, seeking adventure and wanting to break out of the stereotype of domesticity, purchased automobiles and had them shipped to Europe. There they volunteered their services as drivers of injured soldiers to military hospitals, joining upper class women from Britain and France who were also providing mobility in association with medical care and in some cases serving as couriers. In a strange sort of way these women both reflected and rejected traditional feminine roles. Their economic privilege allowed them to travel abroad and to have automobiles that

gave them a sense of independence and adventure, but the role of nurse or driver of the wounded also seems in retrospect to be an extension of traditional female roles and functions

GENDER STEREOTYPING AND THE AUTO IN THE TWENTIES

By the early twenties automobile manufacturers began to realize that the time was rapidly approaching by which most American families would own one car. The demand for "first cars" would then decline, and they were uncertain that the demand for replacement cars could fuel economic growth as substantial as the growth already experienced by the automobile industry. Consequently, the manufacturers began to think about selling second and third automobiles to wealthier American households, and since it was presumed that in most households that had a single automobile the car was part of man's sphere, the marketing of second cars to households largely meant marketing cars that would be used primarily by women. After all, in the twenties women had entered the work force in unprecedented numbers and since 1920 had the right to vote. In addition to small numbers of women who had gone to Europe as drivers in service of the war effort, larger numbers had become truck and bus drivers at home during the war. The image of the flapper was dominating the media, girls bobbed their hair, wore short skirts, were seen drinking and smoking in public, and women were attempting to be increasingly assertive. The automobile was seen by some as a tool that could help liberate women from their traditional roles and help break down the barriers between socially defined gender roles of men and women.

Yet, traditional values were also strong, and the flapper was in reality more a counterculture image than she was the typical housewife of the twenties. Opinion leaders and corporate executives such as those manufacturing automobiles seemed to need more than ever to reinforce the traditional images of women against threats of change. Like conservatives of the current era, they spoke out against the declining importance of family values and home and transformed the very meaning of the liberation of women from a change in their roles to a release from drudgery by applying technology to the reinforcement of traditional female roles. The introduction into the home of electric washing machines, dryers, vacuum cleaners electric and gas ovens and ranges resulted for most women in little change in role and little decline in domestic responsibility. Households spent their rising incomes on such devices, but rather than relieving women of their chores Americans came to expect houses that were more frequently cleaned, clothing that was more frequently laundered, and meals more elegantly prepared. This phenomenon also extended to the automobile, which was used to expand woman's unique feminine sphere to a far greater extent than it was used to allow her to escape from it (Cowan, 1976).

In "The Emergence of the Modern Woman," Barbara Peterson (1982) describes this tendency of the 1920s in these words:

The decade of the 1920s wanted its women soft and pliant and condoned aggressiveness only in sex and sports...In the era which glorified that "the business of America was business," every woman was told through the media and advertising that she was entitled to an automobile, radio, washing machine, vacuum cleaner, and "total electric kitchen. This was to be her true liberation; with her new leisure she could be a better mother and more beautiful wife.

It is not really surprising, then, that in a world of jazz, rouge, and short skirts, women were deliberately portrayed in extremely traditional roles by those writing advertising copy for the auto industry.

The automobile could play a central role in the nurturing of family, and it was increasingly presented as an opportunity to do a better job of child rearing and as a way to bring family members closer together. An article in **The Literary Digest** of 1927, for example, states that:

How to bring up children in the city and at the same time keep them strong and healthy has always been a problem difficult for parents to solve. The automobile has presented a solution which is found satisfactory in thousands of instances. And while the parents have been engaged in driving their children into the country, the adult members of the family have also been acquiring added vitality which but for their interest in their children's welfare would not have been obtained. The healthy color which characterizes the countenances of many city children is definitely due in part to their motoring experiences.

Building upon the same theme, a General Motors advertisement of the 1920s, typical of hundreds of ads placed in magazines and newspapers, shows a middle class woman picking flowers with her children; their car is in the background. The text reads:

Today the members of a family must make a real effort to keep united. I thought a great deal about this as my children began to grow up. I decided that the most important thing I could possibly do would be to plan ways in which they and I could have good times together. My husband agreed, and for that reason we bought a second automobile, since he had to use his car in getting back and forth to business. I can't begin to tell you of the happiness it has given us—picnics together, expeditions for wildflowers in the spring, and exploration parties to spots of historic interest. It's our very best investment. It has helped the children and me to keep on being pals. Every year thousands of families decide that a second car is a saver of time, a great contribution to family happiness and health.

The text suggests that traditional gender roles might be harder to achieve than in the past, but it glorifies them and recommends an automobile as the path to their attainment.

Similarly, in a long series of advertisements that ran throughout the 1920s the Chevrolet was portrayed using many different appeals to traditional feminine role model. One advertisement, entitled "Where Town and Country Meet," states that a Chevrolet enables the city housewife to buy eggs, vegetables, poultry, and small fruits direct from the farmer's wife, fresh and cheap." Another add entitled "Shop with a Chevrolet" begins with words "Chevrolet Utility Coupe is proving a wonderful help to many housekeepers, more than paying its low cost of upkeep through economies of time and money saved in cash and carry shopping." Another ad in the series is entitled "See the children safely to school," and starts with the text: "Why worry about the safety of your little ones on the highways or crossing city streets on the way to school?" while a similar ad is entitled "Motor to Church in Comfort" (Wachs, 1991).

I am not suggesting that we should read too much into such advertisements. They constitute a convenient lens through which we may understand societal values of their time, but advertisements did not create the gender roles for men and women nearly as much it they responded to them. It is important that we realize how pervasive, influential, and persistent these values were, however, and how conscious people were of the values encapsulated in the advertising copy. In a widely quoted and popular treatise of the day, called **The Suburban Trend**, Harlan Paul Douglass (1925) advocated

the continuation of the trend toward suburbanization or decentralization. He described this trend as the solution of most urban ills, and quite precisely enumerated the ways in which suburbanization differentially affected men and women. He stated quite clearly that women would constitute fewer than fifteen percent of the commuters to central cities from suburban locations, and described in 1925 that suburban living assigned to women the roles of driving their husbands to and from the train stations, driving children to and from school and music lessons, and driving to a variety of shopping locations.

The automobile presented an opportunity for women to break out of the social roles that linked them almost exclusively to home and nurturing. The power of the auto was by the twenties equally available to men and women, who could use it to explore new horizons and who could use it to escape from traditional roles. Conservative social movements—those who wanted to preserve and protect traditional gender roles—naturally found themselves rather aggressively countering the threat of the automobile by reasserting the centrality of traditional roles and integrating the automobile into the nurturing and child rearing activities that were traditionally associated with women. Members of the clergy often wrote about and prepared sermons about the dangerous social consequences of the automobile, which included opportunities for young women to escape supervision in ways that would certainly lead to moral decline.

Seeing the potential of the automobile to broaden women's horizons, some conservatives attacked rather bitterly. While women who drove in the first decades of the century were assumed to have at least some interest in the mechanical properties of automobiles, during the twenties in order to preserve the boundaries between mens' and women's spheres it was increasingly asserted that women lacked interest in or aptitude for mechanical devices and this stereotype became especially well developed with respect to the automobile. Women were presumed to be interested only in the color, styling, and upholstery of cars, while men were presumed to be interested only in technical capabilities of autos. An article in the trade journal, **Automobile Topics**, for example, stated that when shopping for a new car: "One of the first things a woman thinks of...is whether the color of the upholstering will harmonize with her personality, coloring, and clothes." The article goes on to state that if she thinks the car will not complement her looks, the salesman "might as well try to sell his cars to an Eskimo" (Wendt, 1925).

In a popular book, Walter Pitkin (1932) reported on the results of a study that showed that women were the principal buyers of 41 percent of all new cars. Despite women's increasing influence on the automobile industry, in a section of his book not too subtly entitled: "Woman—the Economic Imbecile," Pitkin quotes from a **New York World Telegram** article by Alice Hamilton a description of how a woman goes about buying a car:

When a woman views a motor car and looks as if she were pondering weighty matters the automobile dealer grows elated. "Ah, he thinks, she is considering our wonderful new floating power. She is enchanted by our full pressure engine lubrication. That puzzled look is deceptive. She is not thinking of free wheeling, of automatic clutches. She is wondering if the car is sufficiently impressive to serve as a frame for her as she sits, viewed through the glass by passing admiring multitudes. She considers how her foot, ankle, and calf will look as she steps smartly down upon the running board...Does this fawn gray upholstery go with most of her clothes?

Carrying this type of reasoning even further, Pitkin (1932) rather viciously characterizes the differences in physical abilities of men versus women with respect to the skills needed to operate an automobile. He states that men are more suited by temperament and with respect to motor abilities to tasks like driving a car: "...boys and men on the average greatly exceed women and girls in the ability to manipulate mechanical contrivances," and as a result "women shrink from acting when facing a crisis," "work by fits and starts" when under high pressure, and "work well consistently only when there is no pressure." Consequently, Pitkin (1932) concludes that "women are overcautious, they make poorer drivers than men, and "they cause more accidents on the part of their fellow drivers." He goes so far as to say that "owing to their inferior motor outlets, women succeed best in relatively simple motor activities, such as sweeping, washing, and ironing," rather than more complex motor tasks like driving!

Indeed, the stereotype of the woman driver is one of the most persistent myths of American culture, repeated over and over for decades, systematically reinforcing the gender roles that pervade the larger society. This stereotype has been explored effectively by Michael Berger (1982). Berger points out that the stereotype of the "woman driver" was intended to keep women in their place—i.e. to limit their freedom, and to protect them from corrupting influences in society and in themselves. Over time, through repetition and based on little or no verifiable evidence, women drivers were increasingly portrayed as less proficient, decisive, less aggressive, more flighty, and more unpredictable than men drivers. Comedians and serious social commentators portrayed women drivers as a risk to safety and the cause of congestion and delay. Certainly, many critics—mostly women—railed against this blatant stereotyping; Nancy Barr Mavity wrote in a 1927 article in **Sunset Magazine** that "If a man was non-mechanical, it was a personal accident of temperament; if a woman showed the same deficiency, it was a sex characteristic." But, as Michael Berger pointed out, another author writing in **New Statesman** in the same year of 1927, described women drivers in terms that were more commonly expressed, and that remained a potent image until very recently:

Women do not commonly possess the nervous imperturbability which is essential to good driving. They seem always to be a little self-conscious on the road, a little doubtful about their own powers. They are too easily worried, too uncertain of their own right of way, too apt to let their emotions affect their manipulation of the steering wheel.

CONCLUSION

IMPLICATIONS OF GENDER STEREOTYPING FOR CURRENT RESEARCH AND POLICY

Over the last few decades a dedicated group of scholars have attempted to raise the subject of women's travel patterns and needs to the level of serious scholarship. Dozens of studies have documented that real differences exist between the travel patterns of men and women, and more of those studies will be presented at this conference over the next three days. The preponderance of evidence shows that women are somewhat less likely than men to hold drivers' licenses and to own cars, but that this is probably a cohort difference rather than a persistent gender-linked difference. By that I mean that differences between men and women in vehicle ownership and miles driven are far greater among older age cohorts and are diminishing over time as younger cohorts mature and become the majority of the population. These particular differences, then, reflect social changes over time in the levels with which men and women have access to mobility. Despite the lessening of those differences over time, other differences remain very persistent over time. Women continue to work closer to home than men, women are more likely to use public transit for work trips than men, women are

far more likely to be responsible for non-work household trips, particularly those involving the chaffering of young children or of elderly parents. It is possible to find some statistical correlates with these patterns in income, age, ethnicity, and educational levels, and those findings do much to add to the historical roots of those patterns. These shed light on the real causes of these patterns. I would assert that the less formal historical evidence, and its consistency with recent experience, such as that presented from the August **New York Times**, demonstrate the persistence of gender roles in our society. While many scholars have written about the persistence of separate spheres in the workplace and the home, few have recognized that this phenomenon is also pervasive on our highways and transit systems. That is one of the important reasons for having the conference on which we are about to embark.

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