## RESEARCH NOTE

# THE POLITICAL ECONOMY OF THE AUTOMOBILE - FOUR APPROACHES

#### A Wuffle

The aim of this brief note is to contribute to a much neglected topic: the study of collective movement. Earlier work<sup>1</sup> has dealt with vertical movement; here our focus is on the horizontal. We adapt models representing the views of four different schools of economics: (1) the Chicago school, (2) the rational expectations school, (3) the Malthusian school, and (4) the Veblenian school. We seek to represent these models in a form from which their commonsense plausibility will be apparent.

# The Chicago School

At the heart of Chicago economics is the 'law of the invisible bumper'. The law of the invisible bumper states that 'if every person drives in whatever direction he or she wishes at whatever speed he or she finds convenient, everyone will get to their destination with the least total expenditure of gas'. Closely related to the 'law of the invisible bumper' is the postulate that what any given car does cannot matter, since no single car can significantly affect either the direction or the speed of the 'prevailing traffic'. In the view of Chicago-trained economists, that the assumptions of a model are completely unrealistic is not of relevance to its probable accuracy, since the test of a model does not lie in its assumptions. In particular, in modeling the behavior of cars and drivers as a free market, it is appropriate to neglect the fact that automobiles are by and large driven on roads built by governments, with speed limits and other rules of the road enforced by government officials.<sup>3</sup>

While criticized by John Kenneth Galbraith for their failure to take into account traffic fatalities and smog in evaluating the potential merits of traffic regulation (by focusing only on what minimizes gas consumption), Chicago-trained economists have convincingly replied that whatever may be the drawbacks of roads without speed limits, automotive pollution control devices or policemen, government attempts to make things better would only make things worse. Indeed, this view that 'government can do no good' is an article of faith of neoclassicists, and they have

<sup>1.</sup> See, e.g., A Wuffle (1982) 'The Pure Theory of Elevators', Mathematics Magazine 55: 30-7.

<sup>2.</sup> Chicago-trained economists also tend to neglect the fact that there are some very large trucks on the road, whose behavior other drivers have to pay attention to.

<sup>3.</sup> If subjective factors (such as politics or psychology) are admitted into the models of Chicago-trained economists they do so by making the only realistic assumption possible about human behavior - positing that all human beings behave exactly like Chicago-trained economists.

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devoted a great deal of effort to abolishing the On-road Safety and Highway Administration, an arm of the federal government whose efforts they have ridiculed. However, their negative view of government has recently been challenged by economists of the 'rational expectations' school.

## The Rational Expectations School

Unlike the more old-fashioned Chicago school, which merely believes that 'all human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets' (Becker, 1976:14), the rational expectations school believes that drivers are rational not just in their own behavior but in their ability to anticipate the behavior of the other drivers. In particular, because they accept the Chicago view that every driver will drive perfectly, drivers can also anticipate perfectly the behavior of other drivers. Thus, it is a central tenet of the rational expectations school that no improvements to highway safety can result from government intervention, since if the accident could have been anticipated it logically could not have occurred in the first place. However, the really critical difference between the rational expectations school and the Chicago school comes in how they view the possibility that government action can make things worse. Chicago-trained economists, of course, hold the view that 'that government is best which regulates traffic least'; rational expectations economists, in contrast, believe that government can do no nothing that will in any way affect the flow of traffic, since any regulation that government can impose will be anticipated and thus have no discernible consequences.

## The Malthusian School

The central tenet of the Malthusian school is that 'the population of cars expands geometrically, while roads expand only linearly; thus, there will always be fewer lanes than there are cars to fill them'. This school is especially strong in California and on Long Island. There is considerable empirical support for the central tenet of Malthusian doctrine: For example, from 1970 to 1980, highway mileage went from 3,730,000 miles to 3,955,000 miles, a rate of growth of only 0.6 percent per year (Statistical Abstract of the United States, 1989, Table 1003). In contrast, from 1970 to 1980, motor vehicle registrations increased from 108,418,000 to 155,796,000, a rate of growth 8 times greater than that of highway mileage (Statistical Abstract of the United States, 1989, Table 1012).

<sup>4.</sup> Yes, Virginia, he really said that.

<sup>5.</sup> Few are aware that the famous phrase 'laissez-faire' is only the first half of a longer expression: laissez faire, laissez passer' (J.K. Galbraith, 1987, *Economics in Perspective: A Critical History*, p. 51. New York: Houghton Mifflin). Fewer still are aware that the latter phase was first used in French chariot races of the middle ages by drivers seeking the right of way.

During the oil crisis of the 1970s, economists of the Malthusian school were heard making the claim that is was no use blaming the Arabs, rather it was Mother Nature who was to blame for the fact that the car population had outstripped the fuel resources needed to support it. Further support for the Malthusian view has been found in my own empirical work showing conclusively that, in this century, the US population of cars has expanded faster than its population of people. For example, in 1987, over 7 million cars were born in the USA, whereas US population grew by only slightly more than 2 million (Statistical Abstract of the United States, 1989 Tables 1013, 23 and 27).

### The Veblenian School

While few contemporary economists are willing to admit that Thorstein Veblen was an economist despite his having held an academic position in that discipline, 9 Veblen's insights into the consumer society have striking applications to our present topic. In particular, Veblen's third law, 'As you drive so shall you be judged', 10 might seem to be the only way to account for the fact that some people actually pay more for their cars than what other people have paid for their homes. 11 However, Chicago-trained economists have propounded an alternative explanation for America's love affair with the automobile by appealing to the principle of utility maximization (distance minimization) in accord with Euclid's famous postulate of California geometry: 'The shortest distance between any two points passes through an automobile'. 12, 13

<sup>6.</sup> Actually, many of them were born in Japan and Korea and came as immigrants into the US.

<sup>7.</sup> As of 1986, there were only 158,494,000 licensed drivers in the US, but 181,000,000 registered motor vehicles (*Statistical Abstract of the United States*, 1989, Tables 1013 and 1023). An intriguing empirical question is 'Who is driving the extra 22,506,000 vehicles?'.

<sup>8.</sup> Related work has been done by Bernard Grofman (1988) 'The Supply Elasticity of the American Indian Population, 1950-1980', *Public Choice* 57: 85-8.

<sup>9.</sup> Economists generally consign him to the same category as that of former Ambassador John Kenneth Galbraith, namely that of pop sociologist.

<sup>10.</sup> At Prego's, an ultra-posh Italian restaurant in Irvine, drivers of BMWs and Porsches have their cars valet-parked prominently in front of the restaurant, while those who (like me) drive 1981 Toyota Corollas have their car parked far away so as to be well out of sight of potential restaurant patrons.

<sup>11.</sup> However, it was not Veblen, but I who first noted that 'If wishes were horses, California beggars would drive very powerful cars'.

<sup>12.</sup> It is important to understand that, in California, distance is measured in minutes, not miles. For example, the answer to the question 'How far is it between UCI and UCLA?' is 'A little over an hour, if traffic is moving'.

<sup>13.</sup> Other economists, inspired by evolutionary analogies, have proposed that automobiles, like dinosaurs, have lost their niche, and should be replaced by smaller and more flexible vehicles, e.g. bikes. George Orwell, not normally thought of as an economist, uttered what has become the rallying cry for groups as diverse as environmentalists and the Hell's Angels: 'Two wheels good, four wheels bad'.

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