In this book, Gordon Tullock offers a general theory of society, i.e., a theory encompassing both human and non-human societies. His strategy is to apply to non-human societies the tools that have evolved in economics. Specifically, Tullock's thesis says that the behavior of the social insects can be thought of as the interaction of preference functions and the environmental consequences of individual behavior. Thus, a theory evolves that, in principle, is capable of predicting whether a given species will survive in a particular niche. Mixed in with the theoretical discussion is an engaging description of several non-human species. Given Tullock's success in applying economic tools to political problems, it will be interesting to see if bioeconomics attains the stature of public choice. (JEL B49)

In 1776, Adam Smith published An Inquiry into the Nature and Causes of the Wealth of Nations, an event that has come to be considered as marking the beginning of economics as a formal academic discipline. More broadly, it was an inquiry into the nature of human society and put forth a general theory. As all well-educated economists know, this theory revolved around the division of labor which, in the grand scheme of things, is occasioned by individual self-interest. Pursuing individual self-interest is viewed as a natural instinct which results in social benefits not envisaged by the individuals themselves.

It is well recognized that Smith did not construct his theory in a vacuum. He was a most astute observer of the society in which he lived and a practicing intellectual. Among the intellectual forces which helped Smith form his theory were Hutcheson, Hume, and the French physiocrats Turgot and Quesney. A frequently overlooked intellectual influence was one particular physician, Dr. Bernard de Mandeville.

In 1705, Mandeville published a sixpenny pamphlet entitled, "The Grumbling Hive: or Knaves Turned Honest." Subsequent expanded versions appeared under the title, The Fable of the Bees: or Private Vices, Public Benefits; with an Essay on Charity and Charity Schools and a search into the Nature of Society.

In Mandeville's beehive, there is prosperity as long as vice is allowed to flourish, but the hive is ruined when the gods impose virtue, frugality, and honesty on the inhabitants. This ruination is the result of reduced aggregate demand (thus anticipating Keynes' paradox of thrift). As for the source of the original prosperity: "Thus vice nursed ingenuity, Which join'd with time and industry, Had carry'd life's conveniences, Its real pleasures, comforts, ease, to such a height the very poor Lived better than the rich before" [Mandeville, 1705, p. 13]. Although Smith criticized Mandeville's use of the word vice, if one substitutes "self-interest" for "vice" in this quotation, one arrives at a succinct statement of Smith's invisible hand (Editor's Introduction to the Cannan edition of The
Wealth of Nations [Smith, 1904, p. xlvi]). Thus, Mandeville is thought to be the source (see also Gide and Rist [1915, p. 88]) of Smith’s famous lines: "Whoever offers to another a bargain of any kind, proposes to do this. Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest" [Smith, 1904, p. 16].

Although Mandeville’s beehive is, in reality, a human society (Editor’s Introduction [Smith, 1904, p. xlv]), the fact that Mandeville uses the beehive analogy suggests the existence of similarities between insect societies and human societies that are instructive in understanding human societies. In the thin volume under review, Gordon Tullock undertakes standing this proposition on its head. Tullock’s thesis is that the tools that have been thought useful in explaining human society may also be useful in explaining non-human societies. As Einstein sought a unified field theory, Tullock is seeking a unified theory of society encompassing both human and non-human species.

Certain species are observed to be solitary in nature (except for mating, when reproduction is sexual), while other species are cooperative or social to a greater or lesser degree. The invisible hand was Smith’s theory of social cooperation in human societies. Tullock does not take this over directly. Remember that Tullock’s thesis claims that the fruitful approach to developing a unified theory of society is to apply the tools of behavioral science (specifically economics) to all species. Both Smith and Tullock agree that there are fundamental differences between human and non-human species (Smith restricting his consideration to the higher animals), but they draw different dividing lines. For Smith, the dividing line was that humans have a natural inclination to "truck and barter" which, motivated by and working through self-interest, produces the general betterment of human society. No such propensity is observed in the higher (non-human) animals. Although Smith’s treatise begins with a description of a pin factory and elsewhere discusses capital extensively, Smith is never able to free himself from the physiocrats’ preoccupation with agriculture. Smith’s invisible hand corresponds more nearly to Tullock’s description of ant and termite societies than to Tullock’s conception of modern human society. For Tullock, the natural inclinations of insects are more a matter of hereditary programming. Tullock’s dividing line between human and non-human societies is that in human societies, hierarchies evolve and exercise central control. In non-human societies, such hierarchies do not evolve. For Tullock, the palm and back of the hand may still be invisible, but the fingers are visible.

Now to return to the need to explain both egoistic and cooperative behavior in a general theory of society. In the evolutionary scheme of things, there are species occupying niches that would not be habitable by solitary members of the species. If individual members of the species were to engage exclusively in egoistic activities, the species would lose its niche. How is one to account for the cooperative behavior that is required for survival? It has long been recognized that crude evolutionism is a classification system rather than a theory. Who (or which) are the fittest? Simply put, they are the ones who (that) survive! If a general theory of society is to be provided, something more is required. This something more is what Tullock undertakes to provide.