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THE PUBLIC CHOICE SEDITION:
VARIATIONS ON THE THEME OF SCIENTIFIC WARFARE

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SYNOPSIS

Given a significant element of truth in "Public Choice", a modest element must be found when a similar approach is made to the behavior of economic scientists. Harry Johnson found this in "The Keynesian Revolution and the Monetarist Counter-Revolution". Following him, I find more in the Public Choice "Revolution" itself. The basic visions, assumptions and methods of the latter are appraised within its time-space stream. "Variations on a theme by Buchanan" or "The B- and F-Twist" could have been suggestive subtitles for this paper -- an embryonic Economics of Knowledge, a complement to the Sociology of Knowledge.

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The word "sedition" means an "agitation against the authority of a State, conduct or speech tending to rebellion or a breach of public order" (Concise Oxford Dictionary). It is a good word to replace "small (or minor) revolution", an expression applied by Hicks (1980, pp. 208-11) to the Ricardian revolution, among others. In fact, Public Choice has become a seduction and found a place in the history of economic thought. Following Schumpeter (1949, p. 345), another "tool of economic analysis" has been fashioned. My work replicates Harry Johnson's (1971, p. 3) *as if* approach to the conduct of scientific revolutions:

I find it useful in posing and treating the problem to adopt the 'as if' approach of positive economics, as expounded by the chief protagonist of the monetarist counter-revolution, Milton Friedman, and to ask: suppose I wished to start a counter-revolution against the Keynesian revolution in monetary theory, how would I go about it -- and specifically, what could I learn about the technique from the revolution itself?

Let me ask this same question from the viewpoint of the Sedition, and consider both the Keynesian and the monetarist movements as references. Given this approach, some formalism is dropped in the attempt at maintaining Johnson's very appropriate softer manner. Professor James M. Buchanan is the chief protagonist of this scientific movement. Thus, I will take his paradigmatic contribution with Professor Gordon Tullock, *The Calculus of Consent* (1965), as my basic reference; hereafter this book is referred to as the classic, as Professor Buchanan himself calls it.

A recent collection of papers by Professor Buchanan (1985), *Liberty, Market and the State*, is my chief supplementary reference -- hereafter this book is referred to as the popular, and, in fact, it not only conveys the author's current views but also contains many non-technical papers. The "revolutionary" period or "time" extends from the end of the fifties, the beginnings of the "Virginia School", to the seventies, when the movement became internationally accepted (Buchanan 1985, pp. 10-13). The "space" refers obviously to the U.S.A. The Sedition is then assessed in a context dominated by the neo-classical Keynesian-monetarist debate. Its basic visions, assumptions and methods are appraised and compared to those of the concurrent academic movements.

After a general introduction to the Sedition (section 1), an attempt will be made to show how the first requirement for success of revolutions was fulfilled, and to show the limited nature of this achievement; in fact, all the indications are that the chief protagonists aimed at nothing short of *glasnost* and *perestroika* (section 2). The significance of the Sedition in terms of the Political Sciences will then be reviewed while what looks like a deliberate campaign of advertising by its chief protagonists will be exposed; in fact, a Veblenian pedigree is detected in the world-vision of this extension of marginalism (section 3).

The perception of man's nature, "as it is", is compared with the construct *homo economicus*, as it is modified by the theoretical need to hypothesize no circumvention of rules; this comparison shows an amazing flaw in the relation between theory and perceived reality, one which is worth calling the B-Twist (section 4). In considering the role of econometrics, or its total neglect in the movement, a seditious research program is revealed (section 5). Finally, "the

dream of science" is partially followed when the different models of man in psychology, sociology and economics are put together; this leads to a comparative test for the realism of theories, and uncovers another Friedmanian flaw (appendix).

1 - A CATALLECTIC APPROACH TO CATALLEX

Public Choice is usually viewed as an extension of marginalism and is designed to explain collective or public behavior. It could alternatively be called a microeconomic theory of government, an analogy of the theory of the firm or of consumer behavior. Buchanan (1988, p. 9) reports that it is called an economic theory of politics by the "Chicago-based group of scholars". That would fit better. But microeconomics, or marginalism, is itself characterized by the exchange perspective, in the same way as the distributive approach characterizes Marxism, and the production vision the classical school (Hicks 1980, pp. 211-12). A microeconomic theory of government would automatically be understood as embracing the exchange and the homo economicus paradigms. The latter, in its turn, implies that the individual is the analytical unit for the description of collective action (methodological individualism).

Buchanan (1987, p. 335), however, emphasizes all three constitutive elements, and his aim is truly revolutionary: economists should "exorcise the maximizing paradigm..., [concentrate] on the origins, properties and institutions of exchange, broadly considered... [a] snift in perspective on what economics should be all about" (Buchanan 1985, p. 20)! Let me observe at once that in all the criticism about maximizing which permeates the literature of the Sedition no trace of satisficing (Simon 1979, pp. 283-9) can be found, because utility-maximizing behavior is everywhere assumed.

Buchanan joins Hayek in proposing to call this "new economics" catallex -- the science of exchange. Taking into consideration that Hicks (1980, p. 212), following von Mises, and Edgeworth among other nineteenth century economists, also re-names all marginalists as catallectists, let me adopt a midway position. I will use the term here for the works of the chief protagonists of the public choice sedition and, in a more inclusive sense, for all marginalist analysis of phenomena which lies outside its traditional field of inquiry.

The adequacy of this terminology may be confirmed in Schumpeter (1986, pp. 535-6), and in Baranzini and Scazzieri (1986, pp. 22-4) -- hence the sequence of the words catallex, catallectists, catallectic; I am usually referring to Buchanan and Tullock, or just to the former, when talking about catallectists. The economics of politics, discrimination, marriage, religion, biography, and autobiography are good examples of catallex.

An economics of science seems to be another promising example: an economic approach to the behavior of scientific communities as opposed to the sociological interpretation of Kuhn (1971), among others. To my knowledge, nobody has worked on it, except Harry Johnson in his Ely Lecture which may be viewed as pioneering. Johnson scrutinizes the "Keynesian Revolution and the Monetarist Counter-Revolution" in terms of the factors that contribute to the success of an intellectual movement, given the qualities of thesis and antithesis. The protagonists are economic men and the plot involves their strategy in the face of competition, and their conscious moves or decision-making processes. So, my review of the catallectic sedition is in its own flavor and in good company.

It is the economics of politics, the economics of science, not the sociology of politics or science. Economics, not sociology, because of the exclusive reliance on the self-interested behavior of the agents, either individuals or groups -- and catallex because of its methodological individualism. The economics of

science as applied to catallactic warfare is the theme here. Incidentally, Buchanan's accusatory campaign against political scientists and economists alike for their neglect of political warfare -- see in particular section (3) below -- is about a century old. The following paragraph but the last sentence sounds very much like Buchanan's (Schumpeter 1986, p. 795):

Political scientists and economists alike, when talking about public policy, kept on constructing pleasant vistas of a public good, which it was the high destiny of 'statesmen' to pursue, and of a state that floated in the clouds very much like a beneficent deity. The facts of group warfare, ..., and corruption were looked upon as aberrations... instead of essentials. But during that period [from 1870 to 1914] there began something like an awakening of the scientific conscience, and political sociology... put in an appearance.

Scientists as economic men! What a preposterous idea! Johnson's requirements for the success of scientific revolutions are propositions which can obviously be deduced from this postulate, but the *as if* conveys, here, the message that there is only a modicum of truth in the assumption -- this makes for an unbridgeable gulf between Johnson's and Buchanan's approach, as will be shown below. Two major problems should be mentioned here. First, there prevails in the academic community the assumption of a disinterested search for knowledge, for truth. Any suggestion of interested behavior calls in question the scholar's integrity, as Johnson (1971, p. 3) continues the paragraph quoted above:

To pose the question in this way is, of course, to fly in the face of currently accepted professional ethics, according to which purely scientific considerations and not political considerations are presumed to motivate scientific work.

Johnson was extremely strict or perhaps ironical here. "Marshall's attempt to establish a pedigree for the marginal revolution" (Deane 1983, p. 7) would be condemned as the politics of science. The same condemnation could be leveled at Keynes's assumption of Marshallian competition in the General Theory, as it was interpreted by Harcourt (1987, pp. 12-3). On the other hand, if one takes Schumpeter's (1949, pp. 352-5) appraisal of the degree of ideological and advocacy content in the works of Smith as an acceptable level of contamination by national politics, then the majority of those in the profession circumvent this code. In fact, the chief protagonist of the Sedition himself simply reversed the code by making *preservation of freedom* the profession's "moral obligation" (Buchanan 1985, pp. 9, 12, 17).

The second problem which should be mentioned here is caused by this extreme political activism and by the high level of abstraction of the catallactic theoretical work; it is the *Ricardian Vice* (Schumpeter 1986, pp. 540-1): the analyses do not take into account crucial aspects of the phenomena, but are conducted and applied as if they did. As Knight (1960, p. 111) puts it, "all the sciences of man and society are involved if one presses the question [of social action, public choice, policy decision] further and further back -- particularly history, and possibly even more specially, ethics". And let me add that the *Ricardian Vice* is accompanied by all kinds of contradiction, double-thinking, politicking, compromise etc.¹

2 - GLASNOST AND PERESTROIKA

Johnson develops five requirements for the success of revolutions, and an additional one for that of counter-movements, "the first would be the need to find an important social problem that the established orthodoxy is incapable of dealing with, even though it tries its best and claims to be successful" (Johnson

1971, p. 7). The social problem should also reveal the inapplicability of a central proposition of the orthodoxy, an Achilles' heel so to speak, which would be susceptible to a concentrated and successful attack by the revolutionaries: **mass unemployment and a natural tendency to full employment for Keynesians, inflation and money does not matter for monetarists -- some distortion of the orthodox view is quite acceptable here...**

Before going into the sedition itself, a question about the first requirement -- specifically about the social importance of the problem -- should be asked. A fundamental issue is involved. Revolutions in the physical sciences are not influenced by external events when viewed under a sociological approach: Kuhn (1971, pp. 52-76) perceives only the values and internal pressures of the scientific community. Stigler (1960, p. 40) once held the same view for economics, dismissing the "environmental theory" of its development -- in his Nobel Prize Lecture, however, Stigler (1983, pp. 256-8) stops short of this. A good and recent book on the "environmental theory" was written by Dasgupta (1987). Hicks maintains that the importance of external factors has varied from almost nothing in marginalism to predominating in the Keynesian and Ricardian revolutions.

Catallaxy is the last stage in the revolutionary extension of marginalism, and should be seen as the outcome of an internally generated process. Catallaxy should be seen as the marginal revolution itself, "the best example in economics of something which fits the Lakatos scheme" (Hicks 1980, p. 215); i.e. theoretical science is a living organism, "it grows because from the same foundation new propositions are continuously derived... [teleologically,] an organism in search of new knowledge" (Georgescu-Roegen 1967, p. 15). The scientist passively fulfills his role; revolutions occur as a result of unmanaged accumulation of anomalies (Kuhn 1971, pp. 52-65).

An external factor, however, the reaction against government "as it is" today, is the obvious driving motivation behind all the catallactic works. This is explicit in most cases, and catallactists seem proud of the fact, even in the case of their **classic** (Buchanan 1988, p. 7):

Our book [Buchanan and Tullock (1965)] was a mixture of positive analysis of alternative decision rules and a normative defense of certain American political institutions that owe their origins to the Founding Fathers, and to James Madison in particular.

Hicks seems to be correct in allowing for a varying degree of influence of external events. Even where a sociological approach explains better, there are potential gains to be derived from a complementary economic perspective; important and potentially crucial elements are always omitted from the theories, because of the complexity of the phenomenon and the consequent partiality of the social sciences -- see the appendix below and Hicks (1980, pp. 208-9). As it focuses on selfish decisions, the economic perspective naturally brings the environment into the picture. The revolutionary scientist deliberately deviates the attention of the academic community to the anomalies which his antithesis can explain, and in so doing he accelerates the otherwise "unmanaged process" of the sociological interpretation of scientific change. The success of this attention-deviation depends upon the importance of the social problem (Johnson 1971, p. 12):

New ideas win a public and a professional hearing, not on their scientific merits, but on whether or not they promise a solution to important problems that the established orthodoxy has proved itself incapable of solving.

The first requirement may thus be founded, and it is time to talk about the

sedition. Knight (1960, pp. 36-64) has made an exposition of the historical background of the free society and the two historical movements of the democratization of politics and the liberation of economic life. Certainly influenced by this exposition, the chief protagonists of catallaxy see the theory of democracy and of the market economy as products of the Eighteenth Century Enlightenment. The conceptualization arose of a competitive economic order and a limited government, restricted to the establishment of general rules of behavior.

Catallactists, however, depart from Knight, in that they stress that the role of government expanded after the 1700s, through its being used as a means of income redistribution. In the U.S.A. the government now commands more than one third of the national product (Buchanan and Tullock 1965, p. 22). This should be questioned at once. The malpractices which led to government intervention (Knight 1936, p. 48; 1960, p. 144) are just ignored. Furthermore, it is wrong to consider government growth in absolute terms and ignore the rate of structural transformation of the economy, a well known characteristic of modern development, namely "the shift away from agriculture to non-agricultural pursuits and, recently, away from industry to services" (Kuznets 1972, p. 315). So, this invalidates any statement or analysis of government growth in terms of aggregate income, output or employment.

But catallactists are radical counter-revolutionaries, and their goal is a return to an idealized and purified Liberal Revolution -- they even praise the accumulation which happened during that period, "we are a century away from 'capitalism's finest hour', if we restrict..." (Buchanan 1985, p. 195)! This was the clue to the discovery of the catallactic social problem and the related central proposition: individual freedom and homo economicus does not matter. The proposition focuses on the public man construct which is implicit in the stance of Keynesians, monetarists and welfare economists, not to say of the political science orthodoxy.

No instrument of economic policy can legitimately be taken as exogenous in the catallactic system of thought, "the individualist approach or method tends to obliterate any logical distinction between the 'public' and the 'private' sectors of human activity" (Buchanan and Tullock 1965, p. 316). Replacing public man, economic man is the theoretical assumption for the behavior of all economic and political agents. Individual freedom and economic man, or, say, glasnost and perestroika... "Breakdowns and failures in the operation of the system are attributed to 'bad' men, not to 'the rules that constrain them'" (Buchanan and Tullock 1965, p. 281) -- this attack against the student of the political process could equally apply to the monetarists (at least through the sixties and early seventies), and to Keynesians and welfare economists as well. And, against all these, and others, there is a quite recent indictment, "Most economists remain with the benevolent despot image for policy analysis; relatively few have incorporated public choice principles in their discussion" (Buchanan 1985, p. 223).

"Benevolent despot" and "economic eunuch" are terms given to the public man construct -- "eunuch" stands for all constructs or ideal types which ignore the economic dimension of human behavior; in fact, things do not stay at the level of constructs, the mathematical economists are also called "ideological eunuchs" by Buchanan (1985, p. 14). In the latter's terms, the central proposition would perhaps be cast as homo economicus against economic eunuchs. And I wonder whether the real preference would not be the deficit does not matter or, better, the "Keynesian digression" presumes that the Public Authorities are "economic eunuchs" -- see particularly Buchanan (1985, pp. 189-226).

Catallactists make Keynes responsible for the erosion of Victorian fiscal morals. He enabled economics to provide an academic shield for the politicians' move

toward debt financing, "why did they [economists from the 1930s to the 1960s] fail to see the elementary point that the elected politicians will seek any excuse to create budget deficits?" (Buchanan 1985, p. 25). Constitutional rules should then be devised to replace the eroded moral precepts. It is worth emphasizing that the reasoning means that the *homo economicus* assumption is inapplicable to the earlier world, the world of Victorian morals; it became applicable because of moral erosion. Before that, the "Keynesian" public man was an acceptable construct. This is an open contradiction of the neoclassical principle of invariance in time and space.

On the other hand, if morals vary with the passage of time, as catallactists here maintain, this elapsed time differs significantly from that considered to the same effect when discussing Hayek's evolutionary theory, "for those [romantics] who seek... to modify the essential nature of man, as this nature has evolved culturally through the ages" (Buchanan 1985, p. 58). One understands that man's nature became single-mindedly selfish presumably before Spinoza's *Tractus Politicus*, i.e. 1677 (see Buchanan and Tullock 1965, p. 313); or better, Machiavelli should have observed the "fact" at the beginning of the 1500s (see Buchanan 1985, p. 39). How come then that Keynes and the Keynesians killed the Victorian *superego* between the 1930s and the 1960s? Were Machiavelli, Spinoza and other pre-Keynesians making prophecies?

But it seems easy to show that, under the Johnsonian *as if* approach, the catallactic central proposition could not involve the deficit or the Keynesians -- the problem, however, is the lack of space here for a consideration of the Keynesian-monetarist debate in the sixties. It suffices, perhaps, to indicate how little time then existed to give attention to any other antithesis to the Keynesians. In fact, it seems that Keynes is not even referred to in the catallactic classic (Buchanan and Tullock 1965)... a suspicion of 'Machiavellism' has just occurred to me, and the confirmation is precarious -- I have not read the book again, but have just scanned the pages in a *satisficing* manner.

Well, if this is true it repeats the performance of the monetarist chief protagonist: in 1956, Friedman launched the classic monetarist paper, "The Quantity Theory of Money -- A Restatement", where Patinkin (1969, p. 49) later detected that at no point "does Friedman mention the name of Keynes. Indeed, one cannot escape the impression that even the term 'liquidity' is being avoided". A Keynes avoidance syndrome? Or worse, a conspiracy of silence? This ought to be noted because the scientific vision held by catallactists differs from that of macroeconomists, whether Keynesians or monetarists: "methodological individualism strictly interpreted... would rule out all macroeconomic propositions that cannot be reduced to microeconomic ones, and since few have yet been so reduced..." (Blaug 1981, p. 51).

It is true that parochial questions like distribution of research funds made for vehement attacks against the Keynesians -- see Buchanan (1985, pp. 8-9) --, but politicking and ideology must be the over-riding reasons behind the catallactists' tactical behavior towards the monetarists, who were in particular saved from all attacks on the "Keynesian" public man. And let me add that monetarists also see no major problem in government deficits *per se*, maintain the exogeneity of the monetary base -- a major contention by the way --, perceive the Monetary Authorities making mistakes, looking at the wrong target (the interest rate), daydreaming of fine-tuning, ignoring policy-lags, lagging behind in scientific knowledge, etc.; monetarists even perceive the Monetary Authorities as ignorant or corrupt; or, in the catallactic jargon, they also see them as benevolent despots, economic eunuchs and bad men². Post-Keynesians must have been the cause of most venom here; because of things like, for instance, the following (Robinson 1972, pp. 6-7):

It was the so-called Keynesians who persuaded successive presidents that there is no harm in a budget deficit and left the military-industrial complex to take advantage of it. So it has come about that Keynes' pleasant day-dream was turned into a nightmare of terror.

3 - THE VEBLENIAN PEDIGREE

Johnson's second and third requirements for success may be rapidly reviewed. According to the former, the theory should combine clear signs of novelty with the incorporation of the best insofar as it is attainable in the existing orthodoxy. This is the trump card for catallactists. The requirement tends to be automatically fulfilled by any extension of a theory to cover the explanation of distinct phenomena. The third requirement is to introduce an appropriate degree of difficulty in understanding the new theory. Appropriate because it should attract the young and repel the old, in such a way that the former may leapfrog the latter. Attraction or repulsion result from a conscious choice, self-interested behavior, and the key to the solution lies in the opportunity costs involved, generally higher for the old. Lacking knowledge then, they become vulnerable to attacks from the young.

It is worth emphasizing that the economic interpretation of the scientist's behavior is nowhere so obvious as here. And there is certainly a lot more to be so discovered in the sedition, but let me confine this to what looks like the most important aspect. Risk aversion seems to increase with aging. Catallactists may have just played a trump card. Let the chief protagonist speak for himself (Buchanan 1985, p. 25):

we should never underestimate the difficulties, indeed the moral costs, that are involved by a genuine shift in paradigm... It was not easy for economists before the 1960s to think of public choosers as utility maximizers... Few want to reap the scorn that Machiavelli has received through the ages...

Johnson here duly emphasized the problem of attracting the young, but it would be within his vision to make promotion of the new theory another requirement for success. He was theorizing from the evidence provided by two macro movements, however, and promotion may not have played there such an important role as it ostensibly played in the catallactic micro movement. After all, to catallactists the banishing of advertising is nothing more than market protection. Even in the case of medical doctors, ethics only comes in as "rhetoric". So, let me review some clear promotional passages, while simultaneously showing how catallactists view the political science side of the sedition. In the real world, politics includes, embraces or encompasses economics (Buchanan 1985, 49):

A somewhat different way of emphasizing the relationship between economics and politics, as social processes, is to say that, in the formulation here, 'economics' is fully incorporated within 'politics'. Economics is one particular process through which potential conflicts among separate individual interests are settled.

It should be emphasized, however, that catallaxy has nothing to do with the economist's usual perception of the political scientist (Buchanan and Tullock 1965, p. 302):

It is perhaps clear that most of the so called idealist theory-philosophy of political order is quite foreign to our approach... the most 'sympathetic' or 'congenial' works are to be found among the 'realists' in the history of political doctrine [contract theorists of political order].

Catallaxy proposes a re-arrangement of scientific labor between economics and politics, the former covering "all processes of voluntary agreement among persons" -- the exchange paradigm --, and the latter dealing with "the realm of non-voluntary relationships -- the power paradigm (Buchanan 1985, pp. 20-1). It involves an exchange, a "voluntary deal", between economists and political scientists... the former care about "pure exchange", the latter may as well play with market imperfections and the like... a "beautiful" dream, pure economic man and pure exchange in all sectors of life! Catallactists play "positive-sum games", political scientists, negative or zero-sum ones... Returning to the revolutionary words (Buchanan and Tullock 1965, p. 266):

Our assumptions about human nature may be judged 'pessimist' but our conception of the political process, as such, is surely more congenial to those seeking 'sweetness and light', 'peace' and all such good things than the conception usually implicit in the political discourse.

That was touching... Among the numerous possible headlines, I decided on an actual one from a recent paper, "Public choice can help build a political system to channel self-serving behavior of individuals toward the common good. The 'new' ideas are as old as Adam Smith, David Hume, and the American Founding Fathers" (Buchanan 1988, p. 4). A noble objective and with a missionary flavor: the guiding of the "bad man"! And what a pedigree... No economist should feel scrupulous about a deal with the political scientists (Buchanan 1985, p. 90):

Through the continual refusal and reluctance to conceptualize politics as a complex exchange process, even in its ideal form, modern political scholars offer varying apologies, justifications and rationalizations for the predatory politics that we all observe.

Yes, an impressive assemblage; but it gives the correct flavor, nothing being out of context. To summarize: the economic process is the political process; economists are not political scientists; let us make a deal; economists are optimists; what a beautiful (sacred) field to work on; political scientists deserve replacement! If all such like were lumped together, real **essays in persuasion** would result... Keynes' book would seem improperly named.

"Economics is fully incorporated within politics"... but then economic theories should also be fully incorporated within political theories, and so catallaxy would be no more than a limiting case of the contract theory. "Predatory politics that we all observe"... predatory politics... "The Leviatan-state is the reality of our time" (Buchanan 1988, p. 9)... predatory politician... predatory man... a Veblenian pedigree! The view differs from that of Veblen by focusing on the public sector, by focusing on the politician as the **saboteur** of the system! It is certainly something to be explored in the underlying catallactic view of society. But Veblen was theorizing about the time of the **robber barons**. That "finest hour of capitalism" constituted his empirical evidence... Who are the "robber barons" in politics? No wonder catallactists avoid empirical work...

4 - THE B-TWIST

The **fourth** requirement for success is a new methodology, which appeals to "the more gifted and less opportunistic scholars": an aggregated general equilibrium in Keynes, a prediction of "something large from something small, regardless of the intervening chain of causation" in the counter-revolution (Johnson 1971, pp. 5, 9). And so the **as if** became unduly associated with Friedman. Monetarists have made a contribution only in reversing the Keynesian tendency to develop huge econometric models. Schumpeter (1959, p. 10) has aptly described the approach as follows:

We assume all this experience to be nonexistent, and reconstruct it *ab ovo* (this method is due to Leon Walras), as if the same people, still having the same culture, tastes, technical knowledge, and the same initial stocks of consumers' and producers' goods, but unaided by experience, had to find their way toward the goal of the greatest possible economic welfare by conscious and rational effort.

Catallactists, in fact, conducted a fantastic reversal of the assumption. Postulating self-interested behavior, they formally demonstrated that the veil of uncertainty, at the constitutional decision level, is an invisible hand that leads to the public interest. Unquestionably this demonstration is a major achievement within the micro theory, needing qualification only by the requirement of no fraudulent behavior. In any case, it extends the theoretical domain of the rationality hypothesis, and suggests that individuals act, from self interest, as if they were following rules.

This is different from the extension of the meaning of rationality to cover rule-following behavior. The intelligence in the latter, a suspension of calculation, resides in the understanding that the current actions are informed by unretrievable, but still effective, past reasons. The institutionalist March (1978, p. 592) calls it **systemic rationality**, as opposed to the usually assumed **calculated rationality**:

Suppose we imagine that knowledge, in the form of precepts of behavior, evolves over time within a system and accumulates across time, people, and organizations without complete current consciousness of its history. Then sensible action is taken by actors without comprehension of its full justification.

The catallactists' achievement is such that one may understand the fault in the unwarranted generalization of selfish rational behavior as the sole human reality, as shown above -- see also (Buchanan 1985, pp. 6, 119): thus stigmatizing, **homo economicus is all that matters**. It is more difficult, on the other hand, to make sense of this in the face of opposite statements about the same reality, and also about switches of the *as if* meaning (Buchanan and Tollison 1986, p. 513):

The economist shuns the noble and higher motivations for human action, not because he does not consider these important in some personal sense, but because these motivations are simply excluded from his professional competence... The economist is observed to be modeling human beings as if they were self-seekers; the moral philosopher discusses human beings as if they can be saints.

Buchanan shifts not to Walras, but to Knight, who was in Mill's tradition: man's nature is acknowledged in all its complexity; **homo economicus** is an abstraction which isolates the economic motive from other equally important motivations, "the economic view of man is far from being the whole of human reality, or even an accurate description where it is valid as a partial, abstract view" (Knight 1960, p. 71). Buchanan's *as if*-switching occurs in the "defense" of the economic community against moral philosophers, and against Carlyle who remarked that "the economist's inquiry is pig philosophy". But then, it looks like tactic-switching; and it should also be observed that catallactists are always accusing others of "gear-switching"!

Certainly, both Johnson's paper and this paper of mine may be viewed as catallactic works, as embryonic extensions of marginalism designed to explain the scientific sector. But the appendix to this paper is written with the specific aim of making it absolutely clear that my meaning of the *as if* is the same as

that understood by Mill and Knight, not that understood by Walras and Friedman. In Friedman's (1953, p. 21) terms, an expert billiard player makes shots as if he knew all the geometry involved and had made all the necessary calculations -- Friedman was a pure instrumentalist here; see Blaug (1981, pp. 59-66) for a synthetic presentation of Mill's vision.

The Catallactic Man is supposed strictly to follow the rules... Fraudulent behavior is omitted. "Indeed, a widespread adoption of Judeo-Christian morality may be a necessary condition to the operation of any genuinely free society of individuals" (Buchanan and Tullock 1965, p. 303)... And catallactists talk about a pluralist society! One feels a certain embarrassment with the economic-religious intolerance implied. "Victorious Christianity inherited the intolerant monotheism of its parent religion, Judaism..." (Toynbee 1976, p. 287). "Religious intolerance is distinctive of the Semitic group: Judaism, Christianity, and Islam" (Knight 1960, p. 58). It is a dangerous road to follow.

Take, by contrast, the ethical ideal of polytheistic Greece: "a thing should be done because it is the thing to do, not because it is or is not being done by others" (Knight 1936, p. 72). It is *par excellence* individualistic. In its primitive state, individuality can also be dangerous (Robinson 1983, pp. 14-5):

Many people to whom morality was taught through the medium of religion really believe that there is no other motive for wanting to do what is right than to avoid the wrath of God:... If there is no God, nothing is forbidden... It is still in the infantile stage of a desire to be approved of by others and has not yet grown up into a sense of right and wrong.

Perhaps the statement simply reflects the urge to adjust reality to one's theory -- catallaxy, like game theory, cannot deal with the circumventing of rules. Once more, a dangerous road, but quite common. As Hayek (1975, p. 257) points out, given the "Pretense of Knowledge", it may end in attempts "to shape the process of society entirely to our liking". It may just mean some kind of politics, but religious politics? Leaving aside these major aspects, or coming down to the theoretical one, the established simple meaning of *homo economicus* does not include any moral dimension of the human being. And catallactists adopt it when talking of minimal critical assumptions (Buchanan 1987, p. 337; Buchanan and Tullock 1965, p. 18). But the claim here is that the requirement that the rules should be strictly followed was always implicit in economic analyses (Buchanan 1985, p. 32):

To return again to the Crusoe-Friday illustration... where each party is motivated by self-interest but where the exercise of this interest is itself constrained by some adherence to mutually accepted 'law', which may itself be morally derived, externally imposed, evolved as custom, or contractually established... it is one [scientific construction] that is categorically distinct from that which straightforwardly models persons as 'beasts' and which embodies no limits on maximizing behavior.

If one accepts the argument, the explanation for the "beast" may rest in a scenario effect, namely the change from private to public sector analysis exposing the incompleteness of the economic construct. But it seems to me that there is no formal need for this internalized adherence to rules when the analysis, implicitly or explicitly, includes the public man construct in the enforcement of the law. The replacement of the latter by the economic man then means the need to hypothesize adherence to rules. Anyway, the state of the discourse is rather curious. "Man as we know him" or "man's nature" is basically selfish. But man's theoretical construct must contain an ethical dimension. Persons are "beasts", but not their model... The abstraction adds attributes to reality! It certainly calls for a name. I suggest the B-Twist.

5 - THE RESEARCH PROGRAMME

If the fifth criterion for success had no substitute, the catallactic sedition would still be in its infancy, for there is no consumption or money demand function for "estimation by the budding econometrician" (Johnson 1971, pp. 2, 9). But, of course, there is always some possibility of substitution, here facilitated by the increasing opposition to the transformation of the econometric revolution into an orthodoxy -- Johnson himself passes derogatory comments on the latter, good examples of well substantiated institutionalist and neo-Austrian objections may be seen in Simon (1968, p. 454) and Hayek (1975, p. 250) respectively, and the best thorough appraisal that I know of is given by Morgenstern (1963); the game theorist revolutionary shows, in fact, the need for a counter-revolution against econometrics.

The gulf which separates catallactists from either monetarists or neo-classical Keynesians concerning the value of the econometric work may be symbolized by the last four words quoted below (Buchanan and Tullock 1965, p. 29):

Assumptions may or may not be 'descriptive' or 'realistic', as the words are ordinarily used. In many cases the 'unrealism' of the assumptions causes the model to be rejected before the conclusions are examined and tested. Fundamentally, the only test for 'realism' of assumptions lies in the applicability of the conclusions.

Replacing applicability of the conclusions by accuracy of the predictions, one is reading Friedman's (1953) "Methodology of Positive Economics", a paper that never ceases to generate discussion. The replacement says enough but, as it happens, the point is re-stated very nearly in Friedman's terms in the appendix, "[consistency] with observed real world facts" (Buchanan and Tullock 1965, p. 312). Sufficient evidence, however, is conveyed on the "real" position -- this qualification "real" appears everywhere in the catallactic work, but what is always involved is nothing more than directly perceived reality, as is the case with the "applicability of the conclusions".

Evidence of this, and it may be taken as a stigma, is seen in the object of the book itself, which clearly stated in the first lines of the introduction (ibid., p. 3), "We are not directly interested in what the State or a State actually is, but propose to define quite specifically, yet quite briefly, what we think a State ought to be" (sic)! Doubtless, it is an unconventional way of starting even a revolutionary book... But the distance separating the chief protagonists' perspective from that of the Chicago-based catallactists is stated elsewhere: "their view is that empirical work is the be-all and end-all of the discipline... My own interests have never been in the empirical tradition, as narrowly defined" (Buchanan 1988, p. 9). Monetarists, neo-classical Keynesians and the Chicago-based catallactists do not differ here.

So, a substitute for econometrics is needed as a requirement for success... a substitute for engaging the young in the search for data that somehow fit the theory. This is the point aimed at by Johnson in his fifth requirement. The substitute must provide a perceived opportunity for quick success by the young, a way "to escape from the slow and soul-destroying process of acquiring wisdom by osmosis from their elders and the literature" (Johnson 1971, p. 5). Well, a "nobler task" by far is to look for phenomena which are somehow susceptible of being modeled directly in terms of basic catallactic propositions.

Whatever is achieved may proudly be called MY THEORY..., and the scientific philosophers' complaint should just be ignored (Nagel 1963, pp. 211-2): "the word theory is often used in the social sciences (including economics) rather loosely,

to designate almost any general statement, however narrowed its intended range of application may be". By contrast, Nagel exemplifies its appropriate use in "the Newtonian theory of motion", "the neo-classical theory of consumer choice" etc.

Instead of taking an example from a disciple's work, one may look at an article co-authored by the chief protagonist, "A Theory of Truth in Autobiography" (Buchanan and Tollison 1986, pp. 507-17). That seems to be the catallactic research program. One may go further: take sociological works and see whether the word "individual" could be substituted for the word "group"... This was not invented, but discovered, and I cannot even claim much: "throughout our analysis the word 'group' could be substituted for the word 'individual' without significantly affecting the results" (Buchanan and Tullock 1965, p. 9).

I cannot do more than touch on Johnson's additional requirement for counter-revolutions: a major economist somehow connectable to the counter-movement as the grand pre-revolutionary pioneer; in the case of monetarism, Fisher and the conveniently built bridge (Patinkin 1969, pp. 54-8) in the oral tradition of Chicago. Catallactists claim "Machiavelli... [and] the Italian public finance theorists and sociologists" (Buchanan 1985, p. 39)! Under a "veil of uncertainty", however, the "rule of prudence" demands forerunners for all tastes: "the Founding Fathers and James Madison in particular", Adam Smith and David Hume, Spinoza, Wicksell (particularly in Stockholm), Knight (surreptitiously), etc. etc.

CONCLUSION

Individual freedom is the catallactic social problem (Johnson's first requirement). But what is actually involved is a radical reaction against the qualitative and quantitative growth in the role of government. Here, the saboteur of the system is the politician. Despite Frank Knight, Buchanan's own professor, economic freedom is identified with *laissez-faire*. An empirical verification of government growth in terms of other services, may help to bring less radicalism and more credibility to this supposed liberal stance. But to catallactists pluralistic society means only differences in tastes...

Homo economicus does not matter is the central proposition (second half of the first requirement). In fact, *homo economicus* is all that matters is the catallactic refrain. This central theme led to my development of the B-Twist -- shadowing the catallactists' fulfillment of the fourth requirement for success -- and to my reappraisal of the F-Twist (in the appendix); in both cases, I followed Knight's mode of interpreting the economic construct, i.e. Mill's mode.

For established marginalists, the fear that they might "reap the scorn that Machiavelli has received through the ages" seems to have been a major deterrent to their developing the Sedition. The chief catallactists overcame it, and undertook a far-reaching advertising strategy to attract the young, as if completely aware of the role of persuasion in the paradigmatic debate. That accounts for Johnson's third requirement, given that the second is automatically fulfilled here. The absence of an important empirical function to provide a quick success by the young, Johnson's fifth requirement, is overcome by a simplistic research program: operationally, one can look at a sociological work and see whether the word "individual" could be substituted for the word "group"!

The Economics of Science, taken as a complement to the Sociology of Knowledge, and embryonic as it is in Johnson's schema, helps to explain the success of the catallactists' Sedition, particularly the catallactic warfare -- at times, I could not help thinking that the chief protagonists were acting as if they were using Johnson's analysis to inform their own behavior. Catallaxy is a proper name for this marginal extension of marginalism, certainly not for economics. A

comparative appraisal of its basic visions, assumptions and methods has been made here, using Johnson's schema as leitmotif. Differences ranging from economic men to government deficits or econometrics, macro versus micro perceptions or even the autonomy of science, have been considered by looking at the works of representative researchers in concurrent schools of thought, Keynesians, monetarists, institutionalists, neo-Austrians, etc.

Let me add that the best evidence that history provides for the achievable predominance of the self-centered and self-interested behavior of the rulers, the best evidence for catallaxy, is that of the multi-centenarian Confucian bureaucrats. "Confucians in office had become Legalists in spirit, and the interests they served with a Legalist ruthlessness were their own, not the Crown's (Toynbee 1976, p. 250). And that was perhaps the greatest irony of history, of the kind played on moral philosophers -- catallactists may like it still more, if they get to know that eunuchs were the first to challenge that bureaucracy... (ibid., p. 279).

Finally, history again presents further devastating evidence for catallaxy, but of a quite different nature. All successful invasions of civilizations by barbarians ended up in the assimilation of the latter, beginning with the earliest, the Sumerians. "This civilization had captivated the Akkadian conquerors. They had adopted it almost *en bloc*, including its script and even its religion" (ibid., p. 68). Culture is conveyed in the *superego*... What is then the expected outcome of the *homo economicus* invasion or politics? It may be odd that the catallactic chief protagonist talks so much about morals, but this gives a hint of destiny of the sedition...

Appendix: THE DREAM OF SCIENCE

Samuelson's criticism of Friedman's methodological paper also embodies an economic interpretation of science, like Johnson's, and he softens it, as Johnson does, with humor and as if qualifications, which are omitted below for the sake of brevity (Samuelson 1963, p. 233):

Milton Friedman has a strong effective demand which a valid F-Twist brand of positivism could supply. The motivation for the F-Twist, critics say, is to help the case for (1) the perfectly competitive *laissez faire* model of economics,... and (2), but of lesser moment, the *maximization-of-profit* hypothesis, that mixture of truism, truth, and untruth... Chicagoans use the methodology to explain away objections to their assertions.

Proceeding on Samuelson's line, it still seems possible to add novel comments to this extremely fertile paper -- for recent discussions, see Bolland (1987, pp. 380-7) versus Dennis (1987, pp. 388-93), and Webb (1987, pp. 393-429) versus Wible (1987, pp. 430-40). The methodological requirements on theories, Occam's Razor, are well known, and any elementary consideration of competing theories lists logical fertility (fruitfulness), multiple connection, simplicity etc. When Friedman (1953, p. 10) explicitly discusses the Razor, the third criterion is emphasized while the second is suppressed -- obviously, simplicity favors *homo economicus* and the like, while multiple connection highlights the limitations. But since Friedman (let me recall the Johnsonian and Samuelsonian as if) knows about the importance of multiple connection, its discussion is spread over less dangerous spots (ibid., pp. 20, 25, 29, 38): *attention-deviation* is the name given to the trick in managerial texts (Cyert and March 1963, pp. 35-6).

Margenau develops the Razor quite nicely -- his ordering was followed in my listing above --, particularly the multiple connection criterion (Margenau 1966, p. 32):

Constructs must be **multiply connected**. A situation in which a simple phenomenon is explained by its own private set of constructs is suspect. One hopes and looks for connections between this set and others which account for a wholly different group of P-experiences [reality]. Ultimately, the dream of science is to explain all phenomena, those of economics as well as those of physics and chemistry, in terms of an all-embracing theory in which all constructs are logically related.

Look at the danger of broadly following the dream of science, also called an illusion by Heer (1969, p. 211), and a creed of unified science by Georgescu-Roegen (1967, p. 61)³. Take Freud's structural model -- **superego, ego, id** --, or what looks like quite a simplified version, the trinity of Berne's (1964, pp. 23-7) transactional analysis -- **parent, adult, child**. Simplify it further, taking the three dimensions of human personality as **tradition** (culture, values, moral obligations), **rationality**, **spontaneity**, as these concepts are usually understood in economic literature -- it is certainly a crude approximation, but enough for the purpose at hand.

A weak claim may be made in terms of a framework for organizing the different concepts of man: economic man may be viewed in the second dimension, the traditional sociological man in the first. Not surprisingly, the psychological construct encompasses both of them as special, limiting cases. The embracing psychological construct also "facilitates determination of the range of circumstances under which one or the other simpler construct can be regarded as a good enough approximation" -- and I have just paraphrased Friedman (*ibid.*, p. 38), while talking about a desirable "more general theory than Marshall's", in the last of the less dangerous spots about multiple connection.

In the case of an encompassing theory, the achievement is greater than Friedman indicates. It is the formal delimitation of the applicability of narrow theories; e.g. Newtonian mechanics as the limiting case of relativity, "where the velocity of light can be considered as infinitely big", or of quantum theory, "where Plank's constant of action can be considered as infinitely small" (Heisenberg 1963, pp. 89-90). In this case also, there is no point in dismissing the encompassing theory in terms of simplicity, as Friedman does. Most engineers, the professionals as well as the applied theorists, restrict themselves to learning the limiting case.

Looking further into the taxonomic role of the adjusted psychological construct, in Hayek's (1973, p. 11) evolutionary work the model of man encompasses the first two dimensions of the personality, "Man is as much a rule-following animal [**parent**] as a purpose-seeking one" [**adult**]. And, as has been shown above (section 4), the former is called **systemic rationality** and the latter **calculated rationality** by March. A phylogenetical account of the former -- the survival of the species as the ultimate reason for moral codes -- is given by Joan Robinson (1983, p. 11):

In the absence of respect for property it would have been quite impossible to achieve a reasonable standard of life. Even the simplest investment -- ploughing for next season's harvest -- would not be worth while on a scale beyond what a man could guard at harvest time. To impose fear of punishment by force goes some way, but it is expensive, ineffective, and vulnerable to counter-attack. Honesty is much cheaper.

Despite that, moral codes remain qualitatively distinct from, and at any time irreducible to, **calculated rationality**, "morality is desired and respected for its own sake... he must think it is right because it is right" (*ibid.*, p. 15) -- see Knight on the polytheistic Greece (section 4). The moral codes are internalized rules, rules taken as duties. Robinson explains this by postulating

the existence of "a propensity to develop a conscience in the structure of a healthy human brain... [on a par with] the propensity to learn to talk" (ibid., p. 12). The content of conscience, as in the case of language, is culturally transmitted. Knight reluctantly considers even such historical reductions of human conduct to biological needs and the like, and emphasizes that man has "gotten clearly away from the plane where life is the end of activity, he has in fact essentially reversed this relation" (Knight 1936, p. 27).

The depreciation of duties, or values, in the economic literature may be caused by scientific blindness alone: a testimony of Goodwin to the "wall of hostility and incomprehension" involved in paradigmatic dissent is reported by Harcourt (1986, p. 63); it refers to the case of the Keynesian revolution, in the Harvard of the late 1930s; the problem, as it is manifested within a science of inert matter, is well described by Kuhn (1971, pp. 37, 61) -- the incomprehension, as well as the attempt to throw outside the scope of science, as unimportant or unscientific, any of the aspects of the phenomenon which cannot be explained by the theories, may be called scientific blindness; the problem, as it is manifested between different sciences, is of the same nature, but the blindness can only be worse.

Action dictated by values may still be quite different from conscious rule-following on the grounds of the wisdom expected to be therein contained. Choice is not even evoked in circumstances of imperative moral actions. Moral developments, moral dilemmas, are very topical questions of Western civilization, and very important themes of research in psychology too -- see e.g. Loevinger (1987, pp. 193-207). The substitutability between moral restraints and institutional-constitutional restraints, as the catallactists put it, and the efficiency of which is denied by Robinson, is again a discussion embarrassingly conducted as if it were a decision between "guns and butter".

Hayek (1981, pp. 173-4) may be wrong in his violent attack on Freud, under the label of "the destruction of indispensable values by scientific error". But he does convey the due importance of the matter. And if he is to any extent correct, economists may share the responsibility for a similar effect, but under the label of scientific blindness (ibid., p. 174):

Through his profound effects on education, Sigmund Freud has probably become the greatest destroyer of culture... his basic aim of undoing the culturally acquired repressions and freeing the natural drives, has opened the most fatal attack on the basis of civilization.

Different intensities of preferences are strongly stressed by catallactists when dismissing the "unique feature of the simple majority rule" (Buchanan and Tullock 1965, pp. 125-30). Recalling the impropriety of the Draconian laws, punishing every crime in the same way, the question of different intensities of offenses gains all its significance. And thus do the different intensities of duties, of felt responsibilities and values. Or honesty, to keep Robinson's expression. It is difficult to conjugate the catallactists' emphasis on the different intensities of preferences and the implicit equal intensity in the single and strictly maintained value of the catallactic man, i.e. no circumventing. And this is not an isolated case. An equal intensity of untruthfulness is a major assumption leading to the above referred to "theory" of autobiography (Buchanan and Tollison 1986, p. 510).

Let me take a last look at the taxonomic role of the adjusted psychological construct, by considering Knight's methodological and historic analyses. Here the model of man/woman is always the encompassing construct, leaving no doubt and, when convenient, leaving nothing merely implied; e.g. "it is the basic human nature that has been liberated [Liberal Revolution] -- the human mind, comprising

feelings, intellect and will" (Knight 1960, p. 120): precisely the three dimensions of the construct, but in the reversed order. All this criticism leads to a legitimate claim: the unrealism of *homo economicus*. It is unrealistic, as is the sociological construct, in terms of the theoretical entity of a related science, psychology.

What I am proposing here is a comparative interdisciplinary test for the realism of assumptions, a possibility entirely neglected by Friedman. Certainly, I am not denying the legitimacy of taking *homo economicus* as realistic enough for "the purpose at hand"; this depends on the purpose, and in the way in which it is done, i.e. if consciously done as a limiting case, as a **partial truth**. One way, perhaps, of proceeding is to recall the concept of potentiality in quantum theory, and to postulate a probability of traditional, rational and spontaneous behavior of the human being. It seems susceptible of mathematical treatment, and a major challenge at that. And it maintains an integrated view, through the recognition of an inherently random element in human behavior.

Looking at the economic and sociological dimensions as limiting cases, it gives an indication of a way in which the accumulated knowledge of both sciences may be absorbed. One factor determining the probability of the human response to a stimulus is certainly the nature of the activity. Another is obviously the type of civilization -- or the degree of Westernizing if preferred --, the developed-underdeveloped worlds, or the individualistic-collectivist nations, as Buchanan (1985, p. 109) suggests. It is not proper to proceed here, however, even if a **dream of science** is in question.

Let me finish by forcing a **dream of Keynes** (1984, pp. 326-32) into the encompassing model. The "age of leisure and abundance" will come with the accumulation of capital, if humanity learns the avoidance of wars and revolutions, the control of population and a proper appreciation of science. Then, the *ego* will fade away, the *superego* will resume to virtue and sane wisdom, while the *id* keeps flowering, nurtured by an environment in which "absolute necessities" are freely satisfied (*ibid.*, p. 331):

We shall honour the delightful people who are capable of taking direct enjoyment in things... For at least another hundred years we must pretend to ourselves and to everyone that fair is foul and foul is fair; for foul is useful and fair is not. Avarice and usury and precaution must be our gods for a little longer still. For only they can lead us out of the tunnel of economic necessity into daylight.

The apparent excess weight given here to **multiple connection** hopefully falls short of any of the disharmonious configurations of Occam's values; and the admitted "creed of unified science", or "illusion", does not reach the level of negative utopias -- negative utopias composed of the species *homo economicus* (where this *homo* is taken as sole representative of actual human behavior), were written by Huxley (*Brave New World*) and Zamiatin (*We*), or more "realistically", by Gheorghiu (*La Vingt-Cinquieme Heure*) and Dickens (*Hard Times*) -- these are, of course, the dreams of **catallactists** (see section 3 above).

FOOTNOTES

(1) These two problems have been developed in a monograph which is partially reproduced here, "The Public Choice Sedition: Variations on a Theme by Buchanan". My book, *Economic Philosophy and Policy: the Brazilian Authoritarianism* (Silveira 1987), and a short paper (Silveira 1987-8, pp. 23-8) have been used freely here; both were written in Portuguese, and the book was in its final form in 1985, before my exposure to Professor Buchanan's works. The first version of the book was written in 1983, when Brazil was still under a dictatorship (Silveira, 1984).

(2) Brunner (1973, pp. 9-14) presents the most synthetic analysis of the basic monetarist view, as opposed to the Keynesian, and this before there was any significant influence from the rational expectation and the public choice movements.

(3) I first developed this comparative analysis in Silveira (1980, pp. 249-58), later extending it in Silveira (1984b, pp. 370-5), and in the book referred to in the introduction.

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