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Towards a (re-)integration of the social sciences: *The Calculus of Consent* at 50

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The publication of *The Calculus of Consent* in 1962 marks a watershed moment in the emergence of *public choice theory* and, more specifically, the *constitutional political economy* research program. Over the last 50 years, the book has had a remarkable impact not only in economics but also in the neighboring social sciences, philosophy, and law. The contributions collected in this volume reflect the breadth of fields within which *The Calculus* has served as a challenge to established doctrine, and as an inspiration for new avenues of inquiry. The authors, representing a multitude of disciplinary, geographical, and generational backgrounds, reflect on the contributions of *The Calculus* on the occasion of this anniversary in a variety of ways. Some recall how encountering *The Calculus* shaped their scholarly interests and research orientation. Others report on the book's impact on academic discourse in their field or in their home country. Finally, a number of essays address specific aspects of *The Calculus* that have attracted attention over the years, or that offer opportunities for further research.

Perhaps the most well known contribution of *The Calculus* is the model of constitutional choice developed in the sixth chapter. Undoubtedly, this model represents a significant theoretical achievement. Yet, as the range of themes addressed in the essays collected here demonstrates, the significance of *The Calculus* extends well beyond its specific contribution to analyzing the choice among alternative political decision rules. As we will argue, the more general and lasting impact of the book may come from advancing a theoretical (re)integration of the social sciences that questions disciplinary fragmentation, and reinvigorates the field of *political economy* as originally understood. The opening paragraph of

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The Calculus makes clear that Buchanan and Tullock (1962: v) understood both the positive-explanatory as well as the normative-prescriptive dimension of their project in these terms:

> This is a book about the *political* organization of a society of free men. Its methodology, its conceptual apparatus, and its analytics are derived, essentially, from the discipline that has as its subject the *economic* organization of such a society. Students and scholars in *politics* will share with us an interest in the central problems under consideration. Their colleagues in *economics* will share with us an interest in the construction of the argument. This work lies squarely along the mythical, and mystical, borderline between these two prodigal offsprings of political economy.[1]

In these introductory remarks, we highlight three aspects of *The Calculus* that reflect this re-integration: First, the extension of methodological individualism beyond the traditional boundaries of economics; second, its implications for the normative foundations and prescriptions of this discipline; and, finally, its focus on comparative institutional analysis. Seen together, these contributions reflect a vision of a consistently individualistic, theoretically coherent social science that has much in common with classical political economy.[2]

1 Extending the scope of inquiry, or the virtues of "economic imperialism"

With its ambition to expand the explanatory scope of the "economic approach" beyond the domain to which it had traditionally been applied, *The Calculus* is an integral part of a broader movement that has been labeled—somewhat provocatively—"economic imperialism" (Tullock 1972/2004). Although clearly anticipated in earlier developments,[3] this movement gained momentum in the mid-1950s, and includes such seminal contributions as Anthony Downs' *An Economic Theory of Democracy* (1957), Duncan Black's *Theory of Committees and Elections* (1958), William Riker's *Theory of Political Coalitions* (1962), and Mancur Olson's *Logic of Collective Action* (1965). The implicit, if not explicit, claim of this movement is that the economic approach qualifies as a *general* social theory that is applicable across the whole range of the social sciences, and thus serves as a candidate for their theoretical integration.

The success that generalized economics has been able to achieve in its expansionary drive is commonly credited to the fact that its distinguishing characteristics—methodological individualism and a model of rational, self-interested behavior—provide a coherent theoretical outlook on a broad range of social phenomena that its scientific neighbors, including sociology and political science, traditionally have lacked. While it surely subscribes to such diagnosis, *The Calculus* gives a distinct thrust to this claim by emphasizing that generalizing economics beyond its customary domain is not just a matter of *exporting* its theoretical approach into the domain of its scientific neighbors. Rather, developing a coherent, individualistic social science also requires an "overhaul" of much traditional economics in order to provide for theoretical consistency *within* this discipline. This brings us to a second central contribution of *The Calculus*.

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[1] Quotes henceforth identified with page numbers only are from *The Calculus* (Buchanan and Tullock 1962).

[2] Tullock (1972/2004: 7f.): "Economics was founded by two friends, David Hume and Adam Smith. Although we can clearly see in their work ... the origins of scientific economics, it does not appear that they felt that the distinction between economics and the rest of the social studies was of any great importance. ... They called their discipline 'political economy' and certainly thought of it as much political as economic."

[3] For example, in the closing paragraphs of his 1929 essay on spatial market competition, Harold Hotelling foreshadowed the implications of his analysis for political competition.

2 Towards methodological consistency in economics

While contributing to the expansion of the economic approach beyond the traditional boundaries of economics, *The Calculus* also exposes a methodological inconsistency in the manner in which economists typically have proceeded from their principal field of expertise (the study of market phenomena) to accounting for the "choices" of collective units or organizations such as, in particular, governments or states.[4] This inconsistency affects both *positive* economic analysis and the *normative* prescriptions derived from it. A central aim of the "individualistic theory of collective choice" (22) that Buchanan and Tullock develop is to demonstrate that a rigorous application of the individualism that economics claims as its trademark avoids such inconsistency.

To place this claim in context, we focus on the *positive* and *normative* dimensions of the argument in turn. With respect to the positive dimension, it is useful to recall F.A. Hayek's (1973: 35ff.) well-known distinction between *spontaneous order* and *organization*. Traditional economics has focused, almost exclusively, on developing an elaborate theory of the spontaneous order of the market, i.e., the kind of social order that forms without design as a result of mutual adjustments among separately choosing individuals. Economists have devoted less effort to exploring deliberately organized collective arrangements, such as business firms, voluntary associations, or political communities. When organizations enter the analysis, economists have generally taken the shortcut of a "unitary actor assumption," treating them as decision-making units that act in pursuit of their own presumed "goals." Put differently, instead of building up from assumptions about the behavior of the individual agents that act within organizations, economists normally have provided "the bridge between the individual-choice calculus and group decisions" (vii) by extending the model of utility-maximization from the level of individual behavior to "the larger family group, the business firm, the trade union, the trade association, the church, the local community, the regional or state government, the national government, and, finally, the world" (Buchanan 1964/1979: 21).[5]

For Buchanan and Tullock, such treatment of organizations exposes a methodological inconsistency between the economic theory of market activity on the one hand, and of collective action on the other. They reject "at the outset any organic interpretation of collective activity" (11) that ascribes to collective units such as the state "an existence, a value pattern, and a motivation independent of those of the individual human beings claiming membership" (Buchanan 1964/1979). Instead, they stress that individual persons must be conceived "as the only ultimate choice-makers in determining group as well as private action" (vi) and that group decisions are to be regarded as "the result of individual decisions when the latter are combined through a specific rule of decision-making" (35).[6] Such an individualistic

[4]Tullock (1959/2004: 51): "Economists have devoted a great deal of thought to problems of governmental policy and, in particular to the question of proper allocation of resources between the public and the private sector. On the other hand, little attention has been given to the actual process of decision-making or the type of policy likely to come out of the process."

[5]To be sure, significant contributions in the context of the *new institutional economics*—including Oliver E. Williamson's *Markets and Hierarchies* (1975)—have remedied this deficiency by advancing an economic theory of organizations that is on equal footing with the economics of markets. It is telling that Ronald Coase's pioneering early essay on "The Nature of the Firm" (1937) had to await the emergence of this new economics of organization before it received appropriate recognition.

[6]"Collective action must be, under our postulate, composed of individual actions. ... Our theory thus begins with the acting or decision-making individual as he participates in the process through which group decisions are organized" (3). With its critique of an "organic interpretation of collective action" and its ambition to

perspective is sensitive to the fact "that separate individuals ... are likely to have different aims and purposes for the results of collective action" (4). As a result, it is generally not to be expected that "group decisions should be directed toward the achievement of any specific goal" (32), let alone that they exhibit "rationality" in the sense in which this attribute applies to individual purposeful behavior. A methodologically consistent treatment demands recognizing that individual human beings are the ultimate decision-makers in markets *and* collectively organized arrangements. Any difference between the two arenas must therefore be accounted for in terms of the institutional constraints within which individuals pursue their respective interests. As Buchanan and Tullock conclude: "Collective action is viewed as the action of individuals when they choose to accomplish purposes collectively rather than individually, and the government is seen as nothing more than the set of processes, the machine, which allows such collective action to take place" (13).[7]

Welfare economists may not have intended the application of the maximization model or the unitary actor assumption as a *descriptive* account of how organizations such as governments behave. But because it side-steps questions that arise only if organizations are studied at the level of the individual agents within them, the approach runs the danger of naively regarding government as a "benevolent despot". This charge, of course, lies at the heart of the public choice research program that aims to provide an explanatory account of factual politics by consistently applying the theoretical assumptions on which the economics of markets is based to individuals as they act in collective, non-market decision-making. As a classic in public choice theory, *The Calculus* has played a major role in stimulating this line of research.

Importantly, the critique of welfare economics developed in *The Calculus* extends beyond a criticism of the treatment of organizations as unitary actors to a challenge to the underlying *normative* assumption that maximizing social welfare is an appropriate (or even coherent) policy goal. The welfare economist's "social-welfare function" brings, as Buchanan and Tullock charge, an "organic conception in by the back door" (13). In attacking the concept of a social welfare function, *The Calculus* takes up and expands a line of argument that Buchanan had embarked on in his early essay on "Social Choice, Democracy and Free Markets" (Buchanan 1954/1960). There, Buchanan had asserted that the "social welfare function of the utilitarians" is "philosophically inconsistent" in constructing a non-individualist "welfare edifice" on a seemingly individualistic foundation (Buchanan 1954/1960: 80). By employing "components imputable to individuals" (Buchanan 1954/1960) (namely, individual utilities) as its building blocks, it is made to look like an individualist conception. Yet it reduces individuals to utility functions from which, supposedly, the utility values are to be read that serve "as the units of account" (Buchanan 1954/1960: 84) in deriving

develop a strictly individualist approach *The Calculus* takes up a theme that Buchanan had, in fact, already addressed in some of his very early papers and that has been central to his continuing research program. In his 1949 paper on "The Pure Theory of Government Finance" (Buchanan 1949/1960: 9ff.), the second publication in his academic career, he had contrasted "the 'organismic' theory" in which "the state is considered as a single decision-making unit acting for society as a whole" with an "individualistic theory" according to which "state decisions are, in the final analysis, the collective decisions of individuals." Likewise, in his 1954 paper on "Social Choice, Democracy and Free Markets" Buchanan (1954/1960: 93f.) rejected "the organic philosophical assumption in which the collectivity is an independent entity" and advocated an individualist perspective which regards the individual as "the only entity possessing ends and values."

[7] "The State, or the polity, may be conceived as a set of rules or institutions through which individual human beings act collectively rather than individually or privately. That is to say, we may best describe what is normally called 'the State' in terms that specify such rules and institutions" (308).

welfare judgments.[8] Individuals are eliminated entirely as actual decision-makers in collective choice processes.[9] Just as in market processes, a consistent individualism, so Buchanan insists, must build up its *evaluations* no less than its *explanations* of aggregate social phenomena in political decision-making from individual *choices* rather than from individual *utilities* as the constitutive elements.[10]

In this sense, the model of constitutional choice that *The Calculus* develops reflects an approach to economic policy advice that offers a paradigmatic alternative to welfare economics. The approach derives judgments on what counts as an "improvement" in the social condition not from aggregating individual utilities, but from what the respective individuals themselves, by their own voluntary choices, judge as improvement. Just as we conclude from a person's voluntary choice of alternative A over B that she considers the former better than the latter,[11] and just as the economist's claim that market exchanges are mutually advantageous (or "efficient") is ultimately based on no other foundation than the presumption that they are voluntarily entered into,[12] Buchanan and Tullock argue that (as outside observers) we can conclude that collective choices improve the social condition only insofar as the participating individuals indicate such judgment by their voluntary choices. As they put it: "Instead of developing a social welfare function, ... we admit as 'better' only those changes that are observed to be approved unanimously by all members of the group" (285).[13]

Defining the *advancement of mutual gains* rather than the *maximization of social welfare* as the proper policy goal has significant implications for how economics as an applied science should direct its research efforts.[14] Within the framework of the utility-based maximization paradigm, identifying suitable policy measures becomes a *computational* exercise (Buchanan 1964/1979: 24). The focus is on how individual utilities as the "units of account" are to be properly assessed, and how they should be compiled into an adequate measure of aggregate welfare. By contrast, the choice-based *mutual-gains-from-cooperation paradigm*

[8] Buchanan (1959/1960: 107, 117): "The observing economist is considered able to 'read' individual welfare functions. ... Even if the value judgments expressed in the function say that individual preferences are to count, these preferences must be those presumed by the observer rather than those revealed in behavior."

[9] It is worth noting that Walras as well as his successor on the Lausanne chair, Pareto, explicitly asserted this. As Walras (1874/1954: 256) put it: "In our theory each trader may be assumed to determine his own utility or want curves as he pleases. Once these curves have been determined, we show how prices result from these under a hypothetical regime of absolutely free competition." Similarly, Pareto (1911/1955: 61) argued that after individual preference functions are determined "the individual may disappear; we do not need him any longer in order to determine economic equilibrium."

[10] Buchanan (1954/1960: 87): "A necessary condition for deriving a social welfare function is that all possible states be ordered *outside* or *external* to the decision-making process itself. What is necessary, in effect, is that the one erecting such a function be able to translate the individual values (which are presumably revealed to him) into social building blocks. If these values consist only of individual orderings of social states (which is all that is required for either political voting or market choice) this step cannot be taken."

[11] "If an individual shifts to position A from position B when he could have freely remained in B, he is presumed to be 'better off' at A than at B" (172).

[12] "However, the simple fact is, of course, that in normal trade *all* parties gain; there exist *mutual gains from trade*" (250).

[13] "Translated in terms of decisions, this means, of course, that a change can be definitely shown to increase 'total welfare' only if all persons agree, that is, only if there is the unanimous consent of all members of the group" (92).

[14] Buchanan (1964/1979: 28): "This mutuality of advantage that may be secured ... as a result of cooperative arrangements, be these simple or complex, is the one important truth in our discipline."

directs attention to the fact that the political process should be understood "as a particular form of exchange" from which, "as in the market relation, mutual gains to all parties are ideally expected" (23).[15] And just as in the case of market exchange, the ultimate test of mutual gains in collective action lies in voluntary agreement among the parties involved, even if the "social contract" that participants in collective action conclude "is, of course, vastly more complex than market exchange, involving as it does many individuals simultaneously" (252).[16] As a result, analytical attention shifts to the *institutional framework* within which socio-economic processes unfold, and research into potential *institutional reforms* that enhance the prospects for individuals to realize mutual gains moves to the fore.[17] This brings us to the third and final contribution of *The Calculus* we wish to highlight here: Its focus on *comparative institutional analysis*.

3 Comparative institutional analysis

The extension of a consistent methodological individualism to the analysis of organizations—and, in particular, collective political choice—naturally directs attention to the institutional structures within which individuals act, and to whose constraints and incentives they respond. Moreover, because a coherent normative criterion for the assessment of institutions exists—namely, the extent to which they promote mutual gains as judged by the voluntary choices of individuals—*comparative* analysis of institutions that has as its goal the identification of institutional reforms that are likely to improve opportunities for securing mutual advantage becomes a critical task for social science. As Buchanan and Tullock note in the concluding sentence of the book, the challenge facing human beings as social animals is to contemplate "how man can organize his own association with his fellows in such a manner that the mutual benefits from social interdependence can be effectively maximized" (306).[18] Of course, *The Calculus* itself offers numerous examples of precisely such an inquiry. To take only one, the analysis of interest group influence in chapter 19 draws attention to institutional reforms that might promote "generality" in policy-making and create roadblocks to discriminatory legislation (see, especially, pages 292–294).[19]

This *institutional* focus has a direct connection to classical political economy as understood, in particular, by members of the Scottish Enlightenment. Buchanan and Tullock (23) draw attention to this connection in identifying the parallels between the concerns

[15] "Collective action is viewed as the action of individuals when they choose to accomplish purposes collectively rather than individually, and the government is seen as nothing more than the set of processes, the machine, which allows such collective action to take place" (13).

[16] "Agreement among all individuals ... becomes the only real measure of 'improvement' that may be accomplished through change" (7). The point of the constitutional choice model that *The Calculus* proposes is, of course, that one must distinguish between voluntary agreement or unanimity as the ultimate test of mutuality of gains and the unanimity as a decision rule, as it "may be quite rational for the individual to choose a majority voting rule for the operation of certain collective activities" (94).

[17] Buchanan (1964/1979: 36): "I am simply proposing, in various ways, that economists concentrate attention on the institutions, the relationships, among individuals as they participate in voluntary organized activity, in trade or exchange, broadly considered."

[18] Buchanan (1964/1979: 28): "Mutual gains can be secured through cooperative endeavor, that is, through exchange or trade. This mutuality of advantage that may be secured ... as a result of cooperative arrangements ... is the one important truth in our discipline."

[19] A concern for institutional rules that promote generality has, of course, occupied Buchanan repeatedly, and is most clearly expressed in his book (co-authored with Roger Congleton) *Politics by Principle, Not Interest* (Buchanan and Congleton 1998).

of *The Calculus* and Adam Smith's argument that markets—within the proper institutional framework—can lead to socially desirable results:

> Adam Smith and those associated with the movement he represented were partially successful in convincing the public at large that, within the limits of certain general rules of action, the self-seeking activities of the merchant and the moneylender tend to further the general interests of everyone in the community. An acceptable theory of collective choice can perhaps do something similar in pointing the way toward those rules for collective choice-making, the constitution, under which the activities of the political tradesmen can be similarly reconciled with the interests of all members of the social group.

Adam Smith's lessons regarding the importance of institutional frameworks in establishing socially desirable patters of action in the market were not lost on the American founders, especially James Madison. Deeply influenced by Smith (see Fleischacker 2002), Madison focused on the design of political institutions, rather than the selection of "enlightened" political leaders, as the key to good governance. In particular, Madison argues in *Federalist No. 51*—an argument that clearly anticipates modern public choice theory—that successful political institutions must generate incentives and constraints that lead participants in collective decision-making unintentionally to promote the public interest in the pursuit of their private ends.[20] Stated differently, the central question of constitutional design for Madison is—as Buchanan and Tullock would put it nearly 200 years later—whether "the pursuit of individual self-interest [can] be turned to good account in politics as well as in economics?" (304). The answer—for Smith, Madison, and Buchanan and Tullock—lies in appropriate institutional design.[21]

It is in this broad sense that *The Calculus of Consent* "marks a return to an integration of the political and the economic problems of social organization" (306). Critically, Buchanan and Tullock do not intend this statement as a nostalgic reflection on classical political economy, although some of their conclusions recall Enlightenment thinking.[22] Rather, they articulate a forward-looking vision of a theoretically consistent, individualistic social science that revives the spirit of *political economy* and focuses on the institutions of collective decision-making. In doing so, *The Calculus* offers hope for significant progress in addressing some of the most pressing concerns confronting human societies through the intelligent, deliberate, but appropriately humble design of political institutions.

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[20] As Madison put it in *Federalist No. 51*: "This policy of supplying, by opposite and rival interests, the defect of better motives, might be traced through the whole system of human affairs, private as well as public . . . the constant aim is, to divide and arrange the several offices in such a manner . . . that the private interest of every individual may be a centinel over the public rights."

[21] "Our approach is based on the idea that, insofar as this pursuit of self-interest does take place, it should be taken into account in the organization of the political constitution. . . . The assessment of the nature of man himself will, or should, determine the respective importance that is placed on institutional-constitutional restraint" (305–305).

[22] "It is not surprising that our conception of the 'good' political society should resemble that held by the philosophers of the Enlightenment" (306).

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