Chapter 5
Choice Versus Interaction in Public Choice: Discerning the Legacy of *The Calculus of Consent*

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Public choice as a field of scholarly inquiry entered the scholarly lexicon in 1968 when the fourth issue of what had been published as *Papers on Non-Market Decision Making* announced that it had adopted the title *Public Choice*. What had previously been an informal Committee on Non-Market Decision Making became formalized as the Public Choice Society. These changes in titles were followed by establishment of the Center for Study of Public Choice at Virginia Tech in 1969. The rest, to recur to a common expression, is history.

Numerous creative thinkers participated in the meetings of the Committee on Non-Market Decision Making that preceded the establishment of the Public Choice Society and in which I participated in October 1964 as a second-year graduate student. Some of those whose presence I still remember, and whose works will be familiar to anyone versed in the literature on public choice, are James Coleman, Otto Davis, Anthony Downs, John Harsanyi, Henry Manne, Mancur Olson, Vincent Ostrom, John Rawls, William Riker, and Thomas Schelling. Also participating as a third-year graduate student was Charles Plott. Leadership in assembling this group and in initiating the pattern of scholarly interaction that later became known as public choice belonged to James M. Buchanan and Gordon Tullock, and their work in this respect is explored by Wagner (2004).

The Calculus of Consent is undoubtedly the Ur-text that defines the legacy of Buchanan and Tullock with respect to the field of scholarly inquiry that has been described as "public choice" since 1968. Publication of that book was accompanied by a constellation of entrepreneurial and organizational activities that initially preceded establishment of the Public Choice Society and *Public Choice*. Those activities continued in the following years and were surely pivotal in generating the present state of affairs where public choice is universally recognized as a field of scholarly inquiry. But what kind of field of inquiry is public choice these days and

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how does it relate to *The Calculus of Consent*? It is this question that I address in this essay. There is clearly contemporary scholarship in public choice and political economics from which it could reasonably be inferred that *The Calculus of Consent* serves the role of Ur-text. But there is equally clearly scholarly work for which that Ur-text status would not be accorded, as Blankart and Koester (2006) recognize in the disjunction they make between public choice and political economics. Yet, this disjunction is a peculiar one to advance in light of the opening line of the Preface to *The Calculus of Consent*: "This is a book about the *political* organization of a society of free men (italics in original)." Whether one describes a body of scholarly inquiry as public choice, political economics, or political economy would seem to be a secondary matter for any scholarly inquiry that seeks to bring economic theory to bear on political activity.

Yet, this is not the case, as can be seen readily by comparing two recent treatises devoted to bringing together politics and economics. The books to which I refer are by Vincent Ostrom (1997) and by Torsten Persson and Guido Tabellini (2000). Any comparison of these books would quickly reveal sharp cleavages in scholarly orientation toward political economy. Analogously, the two parabolas X^2 and $-X^2$ share a common origin and yet point in opposite directions. It is the same with differing orientations toward and approaches toward the application of economic analysis to political phenomena. *The Calculus of Consent* was published a generation before the aforementioned books by Ostrom and by Persson and Tabellini, and it was rendered intelligible in light of the theoretical frameworks and conceptions that were in play at that time. All scholarship has and must have this temporal quality. Yet scholarship can also contain enduring qualities that are independent of the particular conceptual frameworks with which they were conveyed. This is the situation with *The Calculus of Consent*. While the book was conveyed by conceptualizations grounded in choice by a representative or median voter and in representative, two-person interactions, the book nonetheless was fundamentally concerned with the economic logic that lay behind the complex arrangement through which the American republic was constituted. At the time *The Calculus of Consent* was crafted, however, suitable conceptual frameworks did not really exist, as these started to come into play only with subsequent developments in the sciences of complexity. Hence, the themes that were central to *The Calculus of Consent* can take on new life due to these more recent analytical developments.

The appraisal of any economic situation that spans some significant period of time raises the problem of comparability which is addressed through index numbers. The principles that undergird the Laspeyres and Paasche approaches to the construction of indexes pertain as well to the appraisal of scholarly contributions over significant intervals of time. The analogy with index numbers generates two distinct portraits of the legacy of *The Calculus of Consent*. The Laspeyres analogy shows that legacy to be comparatively narrow and perhaps relatively dated: it is an old text to be admired, but it really does not have much to say to us today. In contrast, the Paasche analogy shows it to be broad and highly pertinent today. While public choice is commonly described in brief as the application of economic theory to politics, which *The Calculus of Consent* clearly exemplified, *The Calculus of*

Consent was animated by a desire to bring to bear an economic logic on the architectural principles that informed the American constitutional founding. Those principles, however, could not be elaborated fully through the simple equilibrium models that were in use at that time, which led to a theoretical reduction that removed much of the complex qualities of the founding constitutional architecture. Conceptual tools now exist to explore more fully those complex qualities than what Buchanan and Tullock had available in 1962. What results is a distinctive approach that can be designated as Virginia Political Economy in contrast to what might be called equilibrated political economy and which, in various efforts at linguistic experimentation, I have designated as conjunctive (2006, 2007), entangled (2009, 2010), and knotted political economy (2011).

Index Numbers and the Appraisal of Old Texts

Any comparison of two economic situations separated by some gap of time involves an arbitrary choice of base in terms of which to make the comparison. Economists face this problem mostly in terms of comparing output across place and time. One can, for instance, seek to compare output between the start and the end of a 50-year interval, say 1962 and 2012. Making this comparison involves numerous problems in the construction of index numbers which Warren Nutter (1966) explores with great cogency. If there were no changes in techniques of production or in the qualities or types of products produced over that interval, it would be simple to measure growth, especially if prices were also unchanged. In this instance, growth would be expressed as $= \dfrac{\Sigma P_1 Q_1}{\Sigma P_0 Q_0}$, where the $\Sigma P_0 Q_0$ denotes expenditure in the initial year and $\Sigma P_1 Q_1$ denotes expenditure 50 years later.

To be sure, growth is never a simple matter of producing more of the same thing. There will be products that were produced 50 years ago that are no longer produced, just as there will be products produced today that were not produced 50 years ago. It does not follow, moreover, that later products are superior to earlier products. For instance, the digital and programmable thermostats that are used for home heating and cooling today are more difficult to operate than were the mechanical thermostats of 50 years ago: some qualities of those thermostats have been improved (automatic adjustment of temperatures) while other qualities have been worsened (the necessity to program the thermostat). The measurement of growth across intervals where the characteristics and qualities of products change and when new products appear while old products disappear raises questions of selecting just what to compare between the two periods that do not arise when the same products and associated characteristics and qualities are maintained through time.

The Laspeyres approach to the construction of index numbers compares the current situation against a base established in some earlier period. With respect to measuring growth in output between two periods, the Laspeyres approach measures

growth as $L = \Sigma P_0 Q_1 / \Sigma P_0 Q_0$. Hence, today's output is compared with yesterday's output based on the prices that prevailed in the past. In contrast, the Paasche approach measures growth as $P = \Sigma P_1 Q_1 / \Sigma P_1 Q_0$. Hence, today's output is again compared with yesterday's output, only those outputs are evaluated with respect to today's prices.

The problem of appraising the present significance of old texts is similar to the problem of measuring the growth of output. The object of examination is the present value of the old text relative to its initial value. But how might that comparison be made? Similar to the measurement of growth, this can be done in two distinct ways. Where the Laspeyres method compares the outputs in terms of past prices, the Paasche method compares those outputs in terms of present prices. But what is the analogue to the prices of products in the construction of output indexes when it comes to the valuation of old texts? At this point, historical judgment must replace price data. This act of judgment, moreover, refers to two distinct ways of reading old texts. One way, the Laspeyres analogue, asks how much insight the old text can add in light of contemporary formulations of similar material. The other way, the Paasche analogue, asks how much insight the old text can contribute in light of new conceptual formulations that were not available when the old text was written. Any scholarly contribution is conveyed using analytical formulations that are in play at the time it is formulated and which renders that contribution intelligible to interested readers. At some later moment, new analytical formulations might have come into play that if they were present at the time of the initial formulation might have led to some alternative formulation. If so, appraisal confronts the problem of selecting between something resembling the Laspeyres-Paasche distinction.

The situation I have in mind is illustrated nicely by Nicholas Vriend (2002) asking: "Was Hayek an Ace?" By "ace," Vriend was referring to an economist who worked with agent-based computational models. Vriend answered his question resoundingly in the affirmative. Yet Hayek never worked with agent-based computational models. He could not have done so because the requisite computer technology necessary to carry those models was not in play then. In posing his question, Vriend was using the Paasche and not the Laspeyres method of reading and appraising Hayek's treatment of the use of fragmented and distributed knowledge in society. Agent-based modeling accommodates open-ended formulations where global patterns emerge through interaction among agents, each of whom acts on the basis of limited knowledge. It is readily apparent that Hayek's treatments of the use of knowledge in society would have taken recourse to agent-based models had that analytical technology been available when Hayek wrote. But that technology was not available, leaving closed-form modeling of some type as the only option for expressing ideas. And yet Hayek's ideas about incomplete and distributed knowledge could not be adequately and accurately conveyed through closed-form modeling because such modeling presents a god's-eye view of its material, whereas Hayek denied that such a perspective existed. So Hayek presented his ideas using closed-form modeling as a point of analytical departure and which confines he subsequently tried to escape through language. In contrast, agent-based modeling offers a direct means of escaping the god's-eye view and yet all the same arriving at formulations about systemic properties of interaction among dispersed agents, none of whom

possesses any god's-eye view, as illustrated by Axtell and Epstein (1996), Epstein (ed.) (2006), and Seagren (2011). So Vriend is right to claim that Hayek would surely have embraced agent-based computational modeling in conveying some of his thoughts. And so too Buchanan and Tullock would surely have used some of those insights in developing *The Calculus of Consent*.

The Calculus of Consent: 1962 Versus 2012 as Bases for Appraisal

Joseph Schumpeter (1954: 41) observes that any act of economic explanation starts with a pre-analytical cognitive vision that must subsequently be expressed through a conceptual framework that will render it apprehensible to readers. Those cognitive visions, however, might not be fully or accurately expressible by the theoretical frameworks with which an author is able to work. In this respect, Samuel Johnson once noted that "every man has often found himself deficient in the power of expression, big with ideas which he could not utter, and unable to impress upon his reader the image existing in his own mind" (as quoted by Jacques Barzun (1976: xi)). When authors face this situation, they try to do their best with the modes of expression that are available to them, realizing at the same time that their products must be rendered intelligible in terms of the conceptual frameworks with which their audience is familiar.

Consequently, the problem of Paasche and Laspeyres can arise in appraising the contribution of old texts. This situation faced Hayek with respect to his formulation of fragmented and distributed knowledge, as Vriend explains, and it is likewise present in Buchanan and Tullock's exposition of the "Logical Foundations of Constitutional Democracy," to recur to the subtitle of *The Calculus of Consent*. For the most part, Buchanan and Tullock employed an analytical framework that was readily reducible to the representative agent formulation that later became so common in macro theory and whose public choice equivalent is the median voter formulation. Hence, Buchanan and Tullock's analytical framework appeared grounded in individual choice and representative interaction, as reflected in their various game theoretic exercises. When read in this manner, it is easy to see such a work as Persson and Tabellini (2000) as an extension and amplification of what Buchanan and Tullock began. This appraisal of *The Calculus of Consent* would reflect the Laspeyres-like approach to appraisal where the contribution is evaluated according to the conceptions that were articulated at that time and with that articulation compared with more recent articulations that work with pretty much the same conceptualizations. In comparing Buchanan and Tullock with Persson and Tabellini, for instance, this approach would ask how much of Buchanan and Tullock is still useful in light of the refined articulation of Persson and Tabellini.

In similar vein, and to recur again to Vriend's analysis of Hayek, this Laspeyres-like comparison would compare Hayek's formulation of the use of fragmented and distributed knowledge with subsequent articulations of imperfect knowledge by Sanford Grossman and Joseph Stiglitz (1976, 1980). In making such a comparison,

however, the central features of Hayek's cognitive insight would have been lost, as Thomsen (1992) shows. Hayek's precognitive analytical vision rested on a rejection of any god's-eye posture and sought instead to theorize about fragmented and distributed knowledge that through market interaction led to the assembly of such products as pencils (Read 1958), even though no single person could articulate all of the actions necessary to produce a pencil. The production of pencils, Read recognized and so surely did Hayek, was an emergent quality of interaction within a nexus of market interaction. Hayek's formulation was simply incommensurable with the formulations of Grossman and Stiglitz whose formulations of imperfect knowledge were based on comparison with the knowledge possessed by some presumed god's-eye observer.

Something similar affects comparison of Buchanan and Tullock with Persson and Tabellini. While it is meaningful to describe public choice as the application of economic theory to politics, that description nonetheless contains a good deal of ambiguity once it is recognized that economics is a contested discipline (Reder 1999). While there are numerous margins of contestation over the meaning of economics among economists, I focus here only on one such margin: whether economic theory pertains to *states of equilibrium* or to *processes of motion* (Wagner 2010). For roughly a century now, the mainstream of economic theory has construed the theoretical effort as centered on states of equilibrium. In contrast, Boettke (2007) identifies a mainline of economic theory that centers the theoretical effort on processes of motion and on the institutional arrangements that both facilitate and emerge out of that motion. Public choice theory reflects the same distinction between mainstream and mainline as Boettke associates with economic theory. There is a public choice literature associated strongly with states of equilibrium. There is also a literature associated with nonequilibrium processes of development and institutionally governed relationships and interactions. If the former might be identified as closed-form public choice, the latter could be identified as open-form public choice, or Virginia Political Economy.

There is theoretical space for both types of formulation, much as Wagner (2010) locates theoretical space for both equilibrium and nonequilibrium frameworks for economic theory. To be sure, those alternative theoretical frameworks highlight different phenomena for analytical examination. They represent noncommensurable though not necessarily antagonistic conceptual frameworks. Hence, it is possible for an analyst to work with both equilibrium-centered and process-centered frameworks, only not at the same time as Roger Koppl (2011) explains. With respect to Buchanan and Tullock, and particularly The *Calculus of Consent*, it is surely the case that the foreground of their analytical attention reflected a concern with processes of development and not states of equilibrium, though they took recourse to both types of formulation, as many theorists, including myself, have occasion to do. The central concern of The *Calculus of Consent* was with what might be called the architecture of governance. The architecture of governance does not dictate any particular political outcome but rather provides a framework of interaction within which outcomes emerge. A related effort to characterize such an architecture was set forth by Jane Jacobs (1992), who analyzed different patterns of connectivity

among carriers of what she described as commercial and guardian activities. Similar to Buchanan and Tullock, she argued that those architectural arrangements had significant implications for the quality of human governance.

Contrasting Visions of Political Economy

There are two contrasting visions by which a theory of political economy, or social science generally for that matter, may be developed. One vision emphasizes the structure of reality conceptualized as a state of being or equilibrium. This is the dominant vision with which economic theory has been practiced since the late nineteenth century. The alternative vision emphasizes reality as a kaleidic process of becoming, which Prigogine (1997) examines luminously. Both visions are capable of logical articulation, though the visions are also noncommensurable. One can work with a theory that holds, like Ecclesiastes, that "there is nothing new under the sun" while also working with a theory that holds, like Heraclitus, that "a person can't step twice into the same river." One just cannot work with both theories simultaneously. Theories of public choice, just like economic theories more generally, are of both types. While Boettke's (2007) distinction between mainstream and mainline involves some unavoidable ambiguity because many theorists have worked with both categories at various times, it is nonetheless possible to classify theorists by Boettke's dichotomy by taking into account the foreground and background of their theoretical efforts.

For instance, Joseph Schumpeter's (1954) analytical foreground was centered on kaleidic processes with a background of equilibrium states. That background attracted attention when he pronounced Léon Walras as the greatest economist for his articulation of general equilibrium, and yet it is clear that Schumpeter worked with processes of development in the foreground of his analytical attention, so would belong to the mainline of Boettke's dichotomy. By contrast, Walras would belong to the mainstream with his focus on equilibrium states. Yet Walras (1954: 377–81) also recognized reality as a process of becoming when he briefly challenged his own equilibrium formulation by positing what he described as a continuous market in place of the annual market with which the rest of the book worked. With the annual market, all activities were coordinated in advance of any actual activity in auction-like fashion, eliminating false trading and the problems this creates for the given conditions necessary for equilibrium theory. In contrast, the continuous market was a nonequilibrium framework that Walras noted briefly but abandoned because its open character was not amenable to the closed-form statements he wanted to derive from his theoretical effort.

Like most theorists, Buchanan and Tullock, both in *The Calculus of Consent* and in their other works whether jointly or severally written, reflected both equilibrium states and kaleidic processes in their theoretical work. Perusal of their bodies of work, however, shows clearly that even their use of equilibrium models is employed as a tool to think about processes of development. Perhaps, nowhere is this

relationship between foreground and background made clearer than in Buchanan's (1982) oft-noted remark that order is definable only through the process within which it emerges. This posture stands in stark contrast to the widespread theoretical presumption that a state of equilibrium can be defined independently of any process of interaction among participants. Buchanan is at base a process and not an equilibrium theorist, and so is Tullock as Wagner (2008) explains.

The legacy of Buchanan and Tullock to public choice and political economy is one where the analytical foreground is occupied with processes of societal interaction and with that process played out against a Heraclitus-like background of equilibrium. Consistent with the practice of economic theory around 1960, however, *The Calculus of Consent* was presented largely through a language of equilibrium theory. Representative agent modeling had not come to occupy a central place in economic theory in 1962, but the constitutional calculus that Buchan and Tullock set forth could have been readily assimilated to a representative agent formulation. Indeed, the reduction of political processes to some selection by a median voter is to reduce political activity to a representative agent's optimization problem.

Perhaps nowhere is this representative agent reduction of public choice and political economy expressed so clearly and cogently as it is by Persson and Tabellini (2000). Likewise, perhaps, nowhere is the process orientation that is the true foreground of *The Calculus of Consent* expressed so crisply as it is by Vincent Ostrom (1997). A short comparison of Persson and Tabellini with Ostrom will thus allow proper recognition of the legacy of Buchanan and Tullock, recognizing that these books were published 35 and 38 years after *The Calculus of Consent*.

Persson and Tabellini state that they model "policy choices as the equilibrium outcome of a well-specified strategic interaction among rational individuals (p. 2)." They further note (pp. 6–7) that their "models are always formulated as general equilibrium models to obtain closed-form solutions." Competition between candidates tends strongly to produce an outcome that maximizes utility for the median voter and eliminates rents in doing so, resulting in Pareto efficiency. This happens because of the assumption that the median voter values public output but not political rents. But should the median voter have some preference for one of the candidates, the strength of that preference will both allow political rents while also limiting those rents. In any case, a political outcome is represented as a singular product of an election wherein that outcome is effectively delegated to the median voter.

In sharp contrast to Persson and Tabellini, Ostrom asserts that "majority rule is an inadequate and superficial formulation for constituting viable democratic societies (p. 3)." Part of the reason for this is Ostrom's recognition that "human societies are not determinate systems (p. 11)." Ostrom continues by contrasting a "culture of inquiry" which is open and which is Ostrom's analytical framework with a "culture of command" which is closed and which is Persson and Tabellini's analytical framework. Ostrom subsequently contrasts two forms of sickness: "Tyranny of the Majority … is a sickness of governments … Democratic Despotism is by contrast a sickness of the people … Perhaps the most fatal affliction of a people is a combination of helplessness, envy, and greed (p. 17)."

To recur to an image I have used on several occasions (Wagner 2007, 2010, 2012), equilibrium theory treats society as a form of parade while kaleidic theory treats it as a busy piazza. Parades and piazzas are both orderly social configurations, but ontologically, they are distinct and have different sources of orderliness. A parade is an organization that is directed by a parade marshal. While a parade may be a mile in length, the actions of all participants in the parade are directed by the parade marshal. While parades differ in quality, those qualitative differences would be attributed to such things as the musical and marching skill of the participants and the time given to rehearsal. Furthermore, the parade can be readily reduced to an entity with point mass: nothing of significance is lost by reducing the mile-long line of humanity through which the parade is constituted to a single point that moves through time along some designated route.

In the orthodox theory of political economy and economic policy as set forth by Tinbergen (1952) and continued by Acocella (1994), political power is construed as standing separate from economy and intervening into it. State activity is construed as directed by a single-minded policy maker who, after the fashion of a billiard player, strikes a cue ball to move an object ball to some desired location. Within this formulation, the object denoted as economy is subject to the economic laws that economists seek to articulate, but polity stands outside economy. The initial impetus for public choice theorizing was to bring polity likewise into the ambit of economic law. In ironic contrast, the newer forms of public choice or political economics revert to the old pattern of thought where polity stands apart from economy. Only now the position of policy maker is ascribed to a median voter and with politicians being lackeys who compete for approval from the median voter. The exposition differs from the earlier approach to economic policy, but the effect is the same: a position of economic equilibrium is defined independently of any process by which that equilibrium might have emerged, and political power is used to transform that equilibrium into a new equilibrium. What is described is a parade marshal who suddenly directs the parade to turn left rather than continuing along its previously planned route.

By contrast, a piazza is nothing like a parade even though it is also an orderly social configuration. Most significantly, a parade is not reducible to a point mass entity. The people passing through a piazza at some instant might well contain the same number of people as a mile-long parade; however, the people in the piazza are not all going to the same destination. The orderliness of the piazza does not reside in rehearsal or in marching ability. Rather it resides in such things as conventions of courtesy, a desire to avoid collisions with others, and an ability to make inferences about the intended routes of those nearby so as to avoid collisions. The piazza is a self-ordered, polycentric network of interacting entities, with each entity having its own principles of action. The term "state" likewise denotes a congeries of entities and not a single entity. There is competition among the entities organized within the auspices of state just as there is competition among the entities organized under the auspices of market.

Figure 5.1 represents the idea of an entangled political economy. Shown there is a polycentric arrangement of two types of entity. The entities denoted by circles are
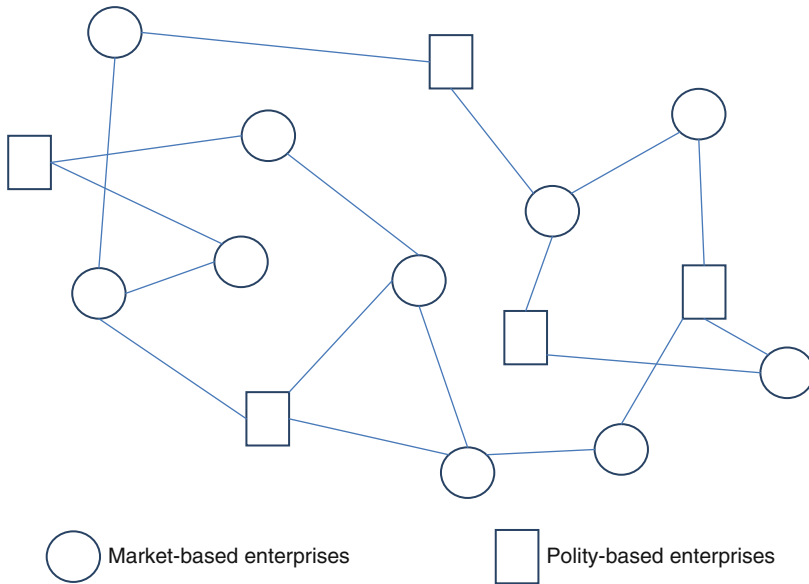
Fig. 5.1 Entangled political economy

market-based enterprises. The entities denoted by squares are polity-based enterprises. All of these entities operate on the same plane and do so through establishing relationships with one another. The principles by which those relationships are established and subsequently operate differ between the organizational forms, as I have explored in such places as Wagner (2007, 2012). The relevant point illustrated by Fig. 5.1 for this essay is that polity is not some entity that stands apart from economy and intervenes into it. Rather, polity denotes first of all a multitude of competing entities and not some unified, singular entity; and it denotes second of all a collection of entities that exists inside the economy, simultaneously imposing on some market entities while at the same time soliciting support from other market entities. What we observe, in other words, is an entangled system of political economy that may be open to different architectures of entanglement, but which remains entangled and polycentric all the same.

The Calculus of Consent was primarily conveyed by equilibrium formulations that had a representative agent look. Accordingly, it would be easy to view such formulations as Persson and Tabellini as a continuation of that line of thought by using a higher level of analytical technology. Indeed, much public choice is consistent with this outlook, as illustrated by the widespread use of the median voter model. To do this would be to take the Laspeyres-based approach to the appraisal of old texts. In this case, the present usefulness of *The Calculus of Consent* would be limited as its formulations have been largely eclipsed by subsequent developments in analytical technology. Doing this, however, would be to reverse foreground and background by treating *The Calculus of Consent* as centered on choices and states of being rather than on interactions and processes of becoming.

Just as I think Vriend is right to treat Hayek as an "ace," so I think it is right to treat Buchanan and Tullock as "aces." At many places within *The Calculus of Consent,* they play up differences among people, which accords better with the image of the piazza than of the parade. True, the members of the parade can differ in other respects but are common in their desire to march in the parade. Having decided to join the parade, they could well participate in choosing their music through some process that would include a vote. In this instance, however, there would be unanimity to participate in the parade and its subsequent vote on the music. This is a long way removed from the willy-nilly application of majority vote and median voters to whatever it is that competition among candidates brings into its grip.

Constitutional Political Economy

In trying to discern the legacy of *The Calculus of Consent*, we should not forget that the subtitle of the book was "Logical Foundations of Constitutional Democracy." *The Calculus of Consent* was written with the American constitutional arrangement in mind and sought to explore the underlying economic logic that was present even if not expressly articulated when that arrangement was established. Within a polycentric system of political economy, there is no singular position from which that system might be modified through conscious choice. There are rather multiple sources from which change can emanate, as Fig. 5.1 illustrates. At the same time, however, it is generally recognized that spontaneous orders can generate systemic features that might be widely if not universally regarded as inferior to alternative features that might be imagined. Thomas Schelling (1978) is a masterful treatment of this theme, and Jane Jacob's (1992) thesis that commingling among carriers of commercial and guardian moralities can result in "monstrous moral hybrids" is a supporting statement that not all patterns that emerge through spontaneous ordering are generally beneficial.

In this respect, *The Calculus of Consent* distinguished between constitutional and post-constitutional levels of activity. Within this conceptual framework, it is meaningful to distinguish between ordinary political activity and the framework of rules through which that activity is governed. As a practical matter, this distinction is not as easy to implement as it is when people choose the rules by which they will play before they start playing whatever it is that they will be playing. Ordinary games are discrete: they can be stopped to revise the rules and with play subsequently resumed. Life is continuous. Yet the distinction between constitutional and post-constitutional activity is a vital heritage of *The Calculus of Consent*.

The American constitutional framework rests upon a fundamental economic logic that people will pursue their interests more vigorously as the intensity of their interest in the matter increases and as their cost of that pursuit decreases. The constitutional question addressed both at the American constitutional founding and in *The Calculus of Consent* is how relationships among a society of interest seekers

Fig. 5.2 Parliamentary rules
and fiscal outcomes
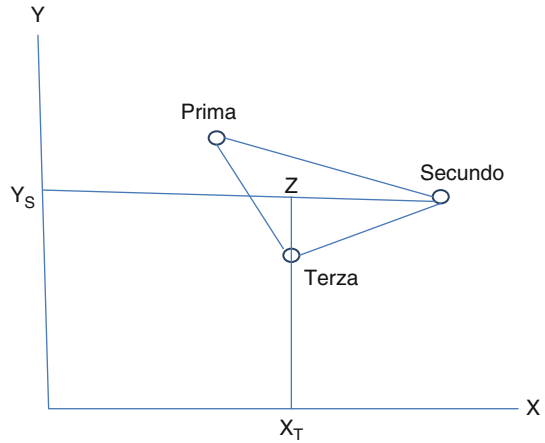
can be ordered so as to promote the general welfare while keeping in check the use of public force as an instrument for factional benefit. There is no easy or final solution to this problem, in part, because constitutional and post-constitutional processes are likewise entangled, leading to constitutional processes sometimes serving to increase the durability of politically generated rents, as illustrated by Buchanan (1959) and Runst and Wagner (2011).

These difficulties aside, *The Calculus of Consent* brought into the analytical foreground recognition that political outcomes are not products of some ruler's choice, whether that ruler is a median voter or a different type of despot, but rather are products of interaction among a multitude of interested participants. In this respect, all political outcomes are catallactical or interactive in nature. With those outcomes being products of interactions as distinct from being choices, they depend not just on the preferences or values of the participants but also on the rules by which those interactions are governed, as Fig. 5.2 illustrates. Shown there are three people who must agree to undertake collectively some amounts of the two activities designated as X and Y. There are, however, numerous particular procedural or constitutional rules by which this three-person interaction might be governed.

Figure 5.2 illustrates two such rules, each of which generates different outcomes; moreover, with larger numbers of people and combinations of interactions, a greater variety of outcomes are possible. One possible framework would allow independent agreement on each activity. This might be accomplished by majority voting on each activity, perhaps with the vote on X preceding the vote on Y. With respect to X, Terza's preferred motion X_T will defeat all other motions. With respect to Y, Secundo's preferred motion Y_S will defeat all other motions. Within this particular constitutional framework, the collective outcome will be (X_T, Y_S) as denoted by Z in Fig. 5.2. An alternative constitutional framework could still require majority approval but would require a single motion to support both activities. Under this institutional framework, all points along any of the three triangular boundaries are possible outcomes, which means in turn that Z is not a possible collective outcome

within this framework—though it would be a possible outcome if unanimous approval were required.

When we come to collective action, what is called public or collective choice is not truly any person's choice in the same manner that choice is portrayed in models of choice. Everything that is described as a collective or public choice is a product of some rule-governed process of interaction among interested participants wherein people typically differ in their evaluations and in their influence within that process. Hence, a mapping can be constructed from the rules that govern interactions to the outcomes of those interactions. This is the analytical schema of constitutional political economy that was set in motion by *The Calculus of Consent* and which, at the same time, was recognized inchoately at the time of the American constitutional founding, as Vincent Ostrom (1987) has explained with especial analytical cogency.

One Final Remark

While I have described *The Calculus of Consent* as the Ur-text of Virginia Political Economy, texts do not propagate themselves. People and their activities are required for the propagation of texts. With respect to such propagation, Randall Collins (1998) explains that such propagation is part of a process of open scholarly competition. In Collins's framework, scholars compete for attention space through their articulation of ideas. That articulation takes place within the context of research programs that have both some hard core propositions that are taken as fixed by contributors to those programs and some set of heuristics that serve to direct scholarly energy in directions that extend and strengthen the reach of the research program.

No two scholars, even those with the creative energy of a Buchanan and a Tullock, can create a research program with their pens alone. Other participants must be enlisted in the propagation of that program. In her *Commons of the Mind,* Anette Baier (1997) explains that it is easy for a person to exaggerate how much of a scholar's thought is his or her creation when a good deal of that thought is set in motion through interactions with others. Within contemporary academic settings, that interaction occurs through publications, which other people read, and presentations, which leads to discussion and other forms of interaction. Teaching, in this respect, is one form of presentation.

Scholarly research programs develop as self-organized networks of interested scholars. Organizational entrepreneurship is as much a part of scholarly propagation as are the ideas themselves. Buchanan and Tullock were filled with ideas that provided much analytical material for public choice, but they also pursued a vigorous program of entrepreneurial and organizational activity that expanded interest in their program far beyond what they could have accomplished through publication alone. This is not to say that entrepreneurial and organizational activity can create a research program from just any set of ideas. Not all ideas can be shaped into research programs, and of those that can further entrepreneurial and organizational effort is

required if those ideas are truly to emerge into a robust research program. This Buchanan and Tullock accomplished during their period together in Charlottesville and Blacksburg.

In reviewing the organizational and entrepreneurial work of Buchanan and Tullock across their three Virginia venues (Wagner 2004), I offered the ranking: Charlottesville-Blacksburg-Fairfax. Implicit in that essay was a cardinal appraisal that placed Charlottesville and Blacksburg relatively close together, as I ascribed both places as generating abnormally high returns to scholarly effort. In contrast, I placed Fairfax a distinct third by claiming that it offered only normal returns to academic effort. While eight years later I see no reason to change that appraisal, I do see signs that the program in Fairfax might be poised to capture abnormally high returns as did the programs in Charlottesville and Blacksburg. Under the energetic leadership of Peter Boettke, the F. A. Hayek Program for Advanced Study in Philosophy, Politics, and Economics was established in 2012. This program has the potential for carrying forward and deepening the tradition of Virginia Political Economy that James Buchanan and Gordon Tullock set in motion 50 years ago. We should remember in this respect that *The Calculus of Consent* was created within the academic organization denoted originally as the Thomas Jefferson Center for Studies in Political Economy and Social Philosophy. That center was dedicated to multidisciplinary scholarship in the tradition of the Scottish Enlightenment. George Mason's new F. A. Hayek Program for Advanced study in Philosophy, Politics, and Economics aims to carry forward that same multidisciplinary orientation, which, if successful, holds promise for once again bringing abnormally high scholarly returns to Virginia Political Economy (Buchanan 2006).

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