Deriving “General Principles” in Adam Smith: The Ubiquity of Equilibrium and Comparative Statics Analysis throughout His Works

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Abstract

This paper contributes to the debate over the unity in Smith's corpus by emphasizing Smith's pervasive methodological approach based on an assumption of self-interest. Specifically, Smith consistently relies on equilibrium arguments to explain why a given pattern of economic, political, or social interaction is stable; and comparative static arguments to explain how a stable pattern changes. Some scholars have noted this technique in Smith's economics; however, missing in the literature is an appreciation for Smith's usage of equilibrium and comparative statics arguments virtually every topic that he studies. As we demonstrate, this includes his explanation of morality and benevolence; the theory of languages; the political economics of development; and his theories of law, politics, and government, such as the form of government, property rights, family structure, and virtue in his famous “four stages” theory of history. We close the paper by arguing that equilibrium and comparative statics analysis has significant implications for the contents of Smith's so-called “missing second book” on government, law, and jurisprudence. Finally, this approach makes it easier to see that Smith's historical jurisprudence is more than narrative: it contains a great many theoretical explanations in the form of equilibrium and comparative statics.

1. Introduction

Since the widespread rejection of ‘Das Adam Smith Problem’ in the last quarter of the twentieth century, scholars have searched for unity in the wide-ranging corpus of Adam Smith. Many

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2 In brief, “Das Adam Smith Problem” was a conceptual debate amongst Adam Smith scholars that dates to late 19th-century German scholarship. These scholars argued that there exists a disconnect between Smith’s Theory of Moral Sentiments, in which the primary force of social analysis is sympathy, and The Wealth of Nations, in which the primary force is self-interest. Ultimately, the idea of a fundamental break in Smith’s thinking has been largely rejected, though the debate has evolved into one of reconciling the relationship between TMS and WN. Teichgraeber (1981), Dickey (1986), and Montes (2003b) discuss the historiography of “Das Adam Smith Problem.”
scholars seek to understand his corpus by speculating about the so-called “missing second book” on jurisprudence that Smith promised at the end of *The Theory of Moral Sentiments* (*TMS*)³ but never completed. Seemingly, this missing book was to have bridged *TMS* and the *Wealth of Nations* (*WN*), drawing on ideas developed in his lectures on jurisprudence.⁴

An alternative but less common approach has been to analyze Smith’s social scientific *methodology* rather than the substantive content of his work. Several scholars have observed that Smith sought to apply the scientific method, which he described at length in his essay on the “History of Astronomy” (Berry 2006, Montes 2003a,b,2006, and Skinner 1996b). Dow (2009) also illustrates how Smith’s reliance on the concrete, historical analysis owes “explicit debt to Newton’s [scientific] methodology;” as Dow and others have observed, such a method was intended to uncover the fundamental principles of the human order as Newton uncovered the fundamental principles of the natural order. Henderson (2006:117-18) shows that Smith carefully uses the logical “if/then” form of analysis to state many propositions. Otteson (2002 **, 2011: 130-131) describes an overall “Smithian” approach, arguing that Smith’s *TMS*, the “Essay on Language,” and his analysis of markets in *WN* share the same structure he calls a “market model.”⁵ Blaug (1992:52) also observes that “Books I and II of the *Wealth of Nations* make liberal use of the method of comparative statics later associated with the work of Ricardo.”⁶

Needless to say, more recent emphasis on Smith’s unifying scientific and rhetorical methods—as opposed to the substantive idea contained in his works—has been a popular way for recent revisionist scholars to combat “Das Adam Smith Problem.”

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³ Abbreviations for Smith’s work are explained below at the beginning of the references.
⁴ On the issue of unity in Smith’s corpus and the so-called missing book, see the very different arguments of Fitzgibbons (1994), Griswold (1999), Fleischacker (2004), Haakonssen (1981), and Teichgraeber (1986).
⁵ Otteson’s market model has four “central structural elements”: (1) an assumption about human motivation, such as the desire to communicate; (2) a set of rules, such as rules of grammar; (3) a currency, or what gets exchanged; and (4) an “unintended order” that results from the exchange, such as shared standards of morality.
We take up a similar task in this paper by emphasizing a pervasive method in Smith’s works, namely, his equilibrium and comparative statics arguments. Smith consistently relies on *equilibrium* arguments to explain why a given pattern of economic, political, or social interaction is stable; and *comparative static* arguments to explain how a stable pattern changes in response to a change in the environment. Smith’s extensive use of comparative statics and equilibrium arguments across all his works makes an even stronger case for the methodological unity and cohesiveness of his *oeuvre* as an Enlightenment “science of man.”

Many of Smith’s most powerful ideas—from economics to jurisprudence to general principles of morality—rely on equilibrium and comparative static techniques. Indeed, these methods are a major reason why modern economists think of Smith as a founder of the discipline. As we demonstrate, Smith’s equilibrium and comparative statics arguments extend well beyond the realm of economics. Many of his historical arguments about economic and political development are of this form, including his famous explanation for the stability of feudalism and the transition from feudalism to the commercial society (WN Book III and *LJ*(A) iv.114-159:244-62, *LJ*(B) 285-309: 521-30; see the analysis in Weingast 2017a). Similarly, Smith applies these methods in his explanation for the stability of the Roman Catholic Church’s monopoly during the Middle Ages followed by the rise of competition in the Reformation (WN V.i.g:788-814; explored in Weingast 2017b).

These methods are also a central component of *TMS*, in which Smith uses a sophisticated equilibrium argument to explain why people act morally and a comparative static one to explain different forms of benevolence. His arguments in “Considerations Concerning the First Formations of Languages” also take this form. The student notes on his *Lectures on Jurisprudence* contain a great number of these arguments, such as Smith’s explanation for the
form of government, property rights, family structure, and virtue in his famous “four stages of history” theory. Additionally, several of his lectures in the Lectures on Rhetoric and Belles Lettres rely on this logic.\textsuperscript{7} While these two interconnected methodological ideas are products of modern economics, their logic is apparent in Smith’s works, and he applies them across a wide range of subjects.

Although we discuss many of these applications, the heart of our analysis focuses on two. The first concerns Smith's explanation for the political economics of development during feudalism and draws heavily on this analysis in WN Book III and corresponding passages from the Lectures on Jurisprudence. He presents an equilibrium model of violence and low growth under feudalism, followed a comparative static argument that explains how the commercial towns escaped from that equilibrium. Smith's explanation for the escape from the violence of the feudal equilibrium serves two purposes. First, it embodies his larger approach to the political-economics of development; and second, it provides a positive model of how certain normative goals are achieved – in this case, liberty, opulence, and security. Our second major application studies Smith's positive model explaining how self-centered humans sustain moral behavior. Smith's positive approach to morality explains how normative moral judgments and behavior are sustained in practice.

One obvious and important feature of our argument warrants emphasis: Smith’s equilibrium and comparative statics arguments constitute normative and positive political theory. Traditionally, normative and positive concerns are seen to be two distinct endeavors: normative theory making statements about what \textit{ought} to be and positive theory making statements about what \textit{is} and the conditions under which a given outcome arises. However, Smith’s works

\textsuperscript{7} See, for example, Smith's argument at the end of Lecture 24 on the best choice of rhetorical form for a speaker seeking to persuade based on whether the audience is likely to be favorably disposed or opposed (\textit{LRBL Error! Main Document Only}.ii.135-36:146-47).
indisputably contain elements of both normative and positive political theory, as scholars have noted for decades. By underscoring the equilibrium and comparative statics arguments throughout Smith’s corpus, our approach illuminates the mutually-reinforcing, normative-positive nature of Smith’s ideas: Smith frequently provides positive models that show how a set of normative principles—whether economic growth, political liberty, or moral behavior—can be sustained in practice. We argue that this framework leads to a fuller understanding of Smith’s contribution not as a mere economist, but as a social theorist engaged in an Enlightenment project of developing a science of man and society (Phillipson 2010; Winterer 2016).

This paper proceeds as follows. In the next section, we describe the equilibrium and comparative static methods using examples from modern economics, and we illustrate how these methods can be easily identified in Smith’s works. We then highlight Smith’s application of these techniques across key subjects: political economic development (section 3), morality (section 4), and language (section 5). We close the paper with a discussion of the implications of our approach for Smith's missing second book.

2. Equilibrium and Comparative Statics: A Brief Primer

In brief, equilibrium analysis involves two components: first, a description of a pattern of behavior generated by the interaction of people and organizations; and second, a demonstration of why the individuals involved have incentives to behave in a manner that preserves the pattern. For an equilibrium to exist, therefore, we must show that, given the equilibrium behavior of all actors relevant to an equilibrium, each actor is best off choosing the behavior described in the equilibrium pattern (see Milgate 1987 on equilibrium; see also Milgate and Stimson 2009:78-87).
To illustrate these concepts, consider the canonical interaction between a buyer and seller in a market. This is a situation of “strategic” interaction, meaning, each individual has well-defined goals which typically conflict, at least partially. For example, both the buyer and the seller seek to “better their condition,” to use Smith's phrase; the buyer wants to exchange at a lower price, while the seller, at a higher one. Each, we presume, is potentially better off with an exchange, at least within some range of possible prices. Each has a number of options or strategies from which to choose; such as announcing a price at which they are willing to exchange; each can walk away from the sale. If we hold constant a variety of environmental elements or what are now called “exogenous parameters”—say, the time of year, the price of related goods, the state of the economy—the equilibrium strategy of each actor (the buyer and seller in this example) is the one that, taking the other’s strategy as given, does best according to the actor’s specified goals.

Put simply, in an equilibrium, none of the relevant actors has an incentive to deviate from their equilibrium strategy. In the market example, an equilibrium exists when neither the buyer nor seller can be better off by changing his strategy: the grocer cannot make more money by raising or lowering his price; and the buyer cannot do better either by buying a different quantity or by going elsewhere to make her purchase.

Smith’s theory of market prices (the short-term equilibrium) and natural prices (the long-term equilibrium based on production costs) in Book I of WN provides his rendition of this equilibrium logic in a familiar setting (see Ekelund and Hébert 2007:110-01). Producers will bring quantities of goods to market that try to approximate the effectual demand for that good (the quantity demanded at a given price), and “it is the interest of all those who employ their land, labour, or stock, in bringing any commodity to market, that the quantity should never
exceed the effectual demand; and it is the interest of all other people that it should never fall short of that demand.” If too much is brought to market the economic variables that go into making up the price of that good—rent of land, wages of laborers—have to be paid below the natural rate. Below effectual demand, the price paid for those inputs will rise, and “the quantity brought thither will soon be sufficient to supply the effectual demand. All the different parts of its price will soon sink to their natural rate, and the whole price to its natural price” (WN I.vii.1-15:72-75).

This canonical example of the price and quantity of goods bought and sold in a market reveals the logic that is foundational to Smith’s works. Equilibria—such as the natural price of a commodity brought to a market—are central tendencies toward which all other forces (such as the quantities supplied and demanded of a certain good) are gravitating. As Smith writes of the natural price of a good, “but whatever may be the obstacles which hinder them from settling in this center of repose and continuance, they are constantly tending towards it” (WN I.vii.15:75). It is Smith’s goal—as is ours throughout this paper—to illuminate how these central tendencies emerge and the circumstances under which they are sustained, not just in the obvious settings of markets, but also in Smith’s theories of society and politics.

Our discussion of Smith’s economic equilibrium and comparative statics arguments thus far has not defined a specific type of equilibrium (for example, a Nash equilibrium, dynamic equilibrium, etc). As a number of economic and intellectual historians have recognized, the concept of “equilibrium” held a number of meanings by the time it had been introduced in the late eighteenth century (Milgate 1987). Broadly speaking, the concept connoted a stable balance of forces in which there exist no tendency to deviate, similar to the idea formalized in a Nash equilibrium formalized in the mid-20th century. However, in early economic theory, the concept
of equilibrium also implied “an outcome that any given economic process might have been said to be ‘tending towards’” (Milgate and Stimson 2009: 84-85). Although Smith does not use the term, “equilibrium,” in his theory of prices briefly mentioned above, the “configuration of values (relative prices)” forms the “center of repose” to which “they are constantly tending towards.”

Thus, the notion that there existed central tendencies or conditions of natural convergence—and that these forces were in and of themselves principles or general rules—is essential to Smith’s philosophical system. Equilibrium—and also comparative statics—are part of Smith’s “central organizing category around which economic theory was to be constructed” (Milgate and Stimson 2009: 86).

Comparative statics results arise when we consider the effect of a change in one of the exogenous parameters held constant in the equilibrium analysis. They characterize how an equilibrium shifts in response to the change in a given parameter. To return to the marketplace example, suppose that at a given income, the buyer will purchase two pounds of meat at the posted price. If her income falls significantly, however, she will purchase less meat, perhaps one-half a pound at the posted price. The comparative static holds that as the buyer’s income falls, she purchases less meat.

Comparative static results differ from behavioral relationships, which often take the form of an assertion that “an increase in X results in an increase in Y.” Behavioral relationships are not derived from assumptions, but asserted or inferred from observation or data analysis. For example, students of American elections report many behavioral relations, such as older voters are on average more conservative than younger ones; higher turnout in American elections benefits the Democrats; and turnout is affected in systematic ways by the weather. Although much wisdom may be embodied in a behavioral relationship between X and Y, this relationship
alone does not constitute a comparative static result because the association is not based on a demonstration of the underlying equilibrium logic to explain behavior.\textsuperscript{8}

Our standard for judging equilibrium and comparative statics in Smith is whether he articulates the logic of an equilibrium in the sense that no player has an incentive to choose an alternative set of actions; and for comparative statics, the logic of how an equilibrium changes in response to a changing parameter. We do not insist on a formal demonstration of an equilibrium in the manner of modern economics. Moreover, as will be clear, Smith's analysis of equilibrium and comparative statics is stronger in some settings than in others.

Smith's \textit{Wealth of Nations} is abundant with comparative statics examples—too many to list here, but some of which we supply in the table that constitutes Appendix 1. One of the clearest examples of Smith's comparative statics arguments emerges in his discussion of wages in Book I, chapter x. Smith explains that, subject to the "advantages and disadvantages of different employments of labor and stock," wages tend to an equilibrium. Specifically, wages "must, in the same neighbourhood, be either perfectly equal or continually tending to equality. If in the same neighbourhood, there was any employment evidently either more or less advantageous than the rest, so many people would crowd into it in the one case, and so many would desert it in the other, that its advantages would soon return to the level of other employments" (WN I.x.a.1:116).

Smith suggests a number of comparative statics arguments that explain what happens to a laborer's wage as key parameters change, such as the riskiness of the job, the amount of human

\textsuperscript{8} As an example, consider Adam Smith's observation of a behavioral relationship that prosperity means men are much less likely to train and to fight, hence republics get weaker (\textit{LJ}(A) iv.74-87:228-33). Smith argues that in agricultural societies 1 in 4 people can fight, whereas in commercial republics, more like 1 in 100 can fight, making them weaker (\textit{LJ}(A) iv.93:235). Smith's discussion is not an equilibrium analysis because he posits the relationship. In principle, this behavioral relation could be made into an equilibrium model, for example, by studying the underlying economy, discussed growing opportunity costs of time as the economy develops.
capital required, or overall levels of employment and scarcity? Smith provides the logic: “The wages of labour vary with the ease or hardship, the cleanliness or dirtiness, the honourableness or dishonourableness of the employment,” and “the wages of labour in different occupations vary with the constancy or inconstancy of employment.” (WN I.x.b.2:117; I.x.b.11:120). Smith further argues that: “In years of scarcity, … [m]ore people want employment than can easily get it; many are willing to take it upon lower terms than ordinary, and wages of both servants and journeymen frequently sink.” The opposite occurs in years of plenty (WN I.viii.45-47:100-01). Wages tend toward a complex equilibrium in which they are systematically higher for more difficult or risky tasks.

Smith’s discussion of wages has all the elements of an equilibrium and comparative statics argument. Wages in a “neighborhood” must be the same or tending toward the same. Otherwise, workers will alter their choices, deserting lower paying jobs for higher paying ones. For comparative statics, Smith’s theory has a variety of parameters – riskiness of the job, constancy of the employment, etc. – and he explains how wages are affected by changes in these parameters.

Scholars have failed to recognize the centrality of equilibrium and comparative statics ideas to Smith's crystallization of economics as a science. These comparative static results are general principles that hold for every market, assuming a reasonable system of justice and that wages are not artificially constrained by law or violence. The examples in this section, by no means definitive or exhaustive, are intended to illustrate the intuition underlying equilibrium and comparative statics analysis that can be found throughout Smith’s works. In the following sections, we elaborate on the various equilibria and comparative statics arguments that appear throughout Smith’s corpus.
3. Smith’s Analysis of the Feudal Equilibrium and The Political-Economic Development of Europe

As suggested in the introduction, Smith did not confine his use of equilibrium and comparative statics ideas to phenomena that are often viewed as “purely economic”—prices, wages, rents, etc. In fact, one of the most interesting equilibrium and comparative analyses he provides is an extended explanation of why certain societies emerge from and continue to develop after the feudal order, while others remain at an earlier stages of development. This section explains how Smith used equilibrium logic to explain why Europe endured such a long period of low-growth under feudalism, and how Smith explains the escape from the feudal order as a comparative static.\(^9\)

3.1. The feudal equilibrium following the fall of Rome. Book III of Smith’s *Wealth of Nations* and his earlier *Lectures on Jurisprudence* are often viewed as paradigmatic, early theories of political economic development. Why some countries became rich and others became poor was a central question for Smith and his contemporaries. “When one considers the effects of the division of labour, what an immediate tendency it has to improve the arts, it appears somewhat surprizing that every nation should continue so long in a poor and indigent state as we find it does,” Smith commented in the *Lectures* (*LJ* 521). A careful analysis of his explanations in both the *Lectures on Jurisprudence* and Book III of *WN* reveals how Smith used equilibrium and comparative statics arguments to illustrate the long and difficult process of political economic development in Europe.

As Smith explained, the violence associated with the fall of Rome and subsequent era caused a downward economic spiral as exchange—the necessary basis for the division of labor

and hence of opulence in his theory—became more risky and vulnerable. No government could provide security except on a local basis. As Smith writes, “The king also found it absolutely necessary to grant the power of jurisdiction to these lords; for as he had no standing army there could be no other way of bringing the subjects to obey rules” (LJ(A) iv.119:246). No one could maintain peace; the great lords “were always at war with each other and often with the king, their whole power depended on the service of their retainers and tenents” (LJ(A) iv.126-27:249). In order to maintain some semblance of power and order, then, Europe adopted feudalism as the most natural and rational response to the political uncertainty and constant threat of violence (Moss 1979:85).

Yet feudal Europe continued to be characterized by violence, predation, and little economic growth. Investment, in Smith's view, was generally fruitless; indeed, to invest, improve, accumulate, and better one’s condition was to become a target of plunder. As Smith writes, “the occupiers of land in the country were exposed to every sort of violence…to acquire more might only tempt the injustice of their oppressors” (WN III.i.12:405). Moreover, Smith argues, peasants, the vast bulk of the feudal population, had incentives to eat as much as possible and work as little as possible (WN III.ii.9:387-88). In sum, this constant threat of violence and predation inhibited economic development.

How was feudalism with a low level of economic growth sustained? Just as Smith outlined the parameters that influence the levels of wages, Smith’s answer to this question also outlines key parameters that sustained the feudal order.

Our discussion focuses on violence as the most central of these parameters. Because no one could impose order, the lords were constantly fighting each other. To survive in this environment, surviving lords had to turn their surplus into military might in the form of vassals.
Failing to do so left a lord vulnerable to the plunder of other lords. As Smith characterized the era, the great lords “were always at war with each other and often with the king, their whole power depended on the service of their retainers and tenents” (*LJ*(A) iv.126-27:249).

A second key parameter is the form of property rights as the basis of political bargaining power. Relying on a similar logic, Smith shows why the feudal lords adopted an extremely restrictive code of property rights. Land was the dominant economic asset during the Middle Ages. Because land represented not only economic, but also political and military power in this period, the feudal system’s form of property rights was central to its survival. Smith explains how problems of security required that the form of property rights in land differ from those optimally suited for a market economy. Lords who deviated from the feudal system’s property rights were worse off, because “to divide it was to ruin it.” Similarly, peasants, living at subsistence, had no incentive to work hard, save, or invest. To do so risked plunder. In short, Smith’s explanation for the little- or no-growth feudal system relies on equilibrium logic.

Primogeniture, for example, was a key institution that placed a severe restriction on property rights during feudalism (Henderson 2006,ch8). Because it prohibited a landholder from devising property to anyone but his first-born son inherit, primogeniture precluded both the equal division of an estate amongst all sons, and more generally, the ability of the landholder to devise property by will. In a commercial economy, primogeniture laws significantly hinder economic growth, but in the feudal environment of Europe, it was an indispensable institution to guarantee political security. Land was considered “as the means, not of subsistence merely, but power and protection,” and as such, the security of a landed estate constituted the very protection of political power. As Smith writes about land, “to divide it was to ruin it, and to expose every part

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10 On violence and political power in this environment, see (Samuels 197*, Viner 19**; see also Hirschman 1945).
of it to be oppressed and swallowed up by the incursions of its neighbours” (WN III.ii.; pp. 838-83). Weingast (2017a) applies the same logic to other peculiar features of property rights in land, such as entails and wardship. In sum, the paramount nature of security forced feudal lords to adopt property rights that furthered this end, even at the expense of efficient production.

The logic of Smith's claim forms an equilibrium argument. Given the constant violence, to invest and improve was to become a target of predation. The highly inefficient form of property rights

Smith’s discussion of the feudal equilibrium represents his answer to the question about why so many places fail to become opulent and develop. Individuals had few incentives to invest in capital improvements or new productive techniques because it risked being plundered. The ever-present threat of violence determined the form of political exchange which was based on land-holding; a particular form of land rights emerged to facilitate the local lords’ ability to provide local security, even at the expense of long-term economic growth. In Smith’s view, the feudal world was violent and poor, but stable. In modern terms, we variously characterize this equilibrium of violence as a “vicious circle of poverty” (Macfarlane 2000:98) or a “violence trap” (Cox, North, and Weingast 2017). The agrarian feudal system failed to take the path to economic development, and no one in the feudal system had an incentive to deviate from their choices.

3.2. The emergence of towns and a new equilibrium. Smith’s explanation of how Europe escaped the feudal order and reached a new equilibrium—that of commercial society---is inseparable from his explanation of how the feudal order sustained itself. If understanding the no- or low-growth feudal society, then Smith employed a comparative statics argument to explain why this new order emerged and how it was sustained.
First, the rise of towns outside of the dominion of the local lords and kings reflected a new mode of political bargaining. Initially, towns were small and lacked power. Traders were often subject to the violence and plunder of local lords and king alike (Winch 1978:77). As Smith writes, this “lawless and disorderly state of the country rendered communication dangerous” (LJ(A) iv.142-43: 255-56). The local lords plundered the traders “without mercy or remorse” (WN III.iii.8:402). The feudal equilibrium, with its constant threat of violence, prevented traders from investing and expanding trade.

This environment fostered a critical, political exchange between the town and the king enabled the town to escape the feudal equilibrium of violence and low growth in exchange for revenue that strengthened the king related to the local lords. In exchange for taxes and military support for the king against their common enemies, the local lords, the king granted the town rights of political independence. This independence allowed a non-incremental revolution by which the towns secured their own laws and justice, to build walls and defend themselves, and to expand greatly long-distance trade (WN III.iii.8-9:401-02).

The towns’ independence, growth, and ability to collaborate with the king required their ability to provide security through local military superiority (Winch 1978:76). Absent local military superiority, the towns would have succumbed to the plunder of the local lords rather than escaping the violence and low growth of feudalism. Long-distance trade afforded revenue to the towns to increase their military capacity; in turn, allowing the towns to extend their political, economic, and military reach into the local countryside. The political exchange between king

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11 In Smith's words, “The militia of the cities seems, in those times, not to have been inferior to that of the country, and as they could be more readily assembled upon any sudden occasion, they frequently had the advantage in their disputes with the neighbouring lords” (WN III.iii.10:403).

12 “By granting them magistrates of their own, the privilege of making bye-laws for their own government, that of building walls for their own defence, and that of reducing all their inhabitants under a sort of military discipline, he gave them all the means of security and independency of the barons which it was in his power to
and town also enabled a revolution in liberty, commerce, and security—what Smith famously described as the establishment of “order and good government, and along with them the liberty and security of individuals” in the towns and the cities (WN III.iii.12:405).

We suggest that Smith’s discussion of the transition from the low-growth feudal order to the stage of commercial society—with high growth and political security—takes the form of a comparative statics argument. Smith’s arguments here are not as clear cut as his explanation for differences in wages. The parameters of interest for Smith's comparative static argument about the emergence of commerce are two: first, violence; and second, the new currencies of political bargaining between king and town, effectively, the king selling privileges in the form of corporate organization.

Smith's discussion of the transition to the commercial society explains how the form of property rights in land changed from one equilibrium stage (feudalism) to the next (commercial society). Commercial societies generated wealth through commerce rather than largely through land, and they provided security in a very different manner than the feudal obligations based on an exchange of land for military (and other) services. In the commercial economy, primogeniture was costly while producing few benefits. Commercial societies, therefore, did not hold property in this manner. Smith’s comparative static leads to the conclusion that, as the mode of subsistence changes from agriculture to commerce, so too do the optimal rules of property rights.

This discussion reveals the logic of Smith's comparative static treatment of the growth of towns. In the context of the feudal equilibrium, the political exchange between king and town provided the basis for local military superiority. This military superiority underpinned the town’s

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*bestow. Without the establishment of some regular government of this kind, without some authority to compel their inhabitants to act according to some certain plan or system, no voluntary league of mutual defence could either have afforded them any permanent security, or have enabled them to give the king any considerable support” (WN III.iii.8-9).*
escape from the violence trap. It also allowed a growing sphere of commerce, higher levels of the division of labor, and long-distance trade, all fostering the town’s economic growth. Whereas investment by individuals living under local lords was subject to plunder, investments by those living in towns were protected by the towns’ military security and liberty. In the presence of a stable order and security, economic growth of the towns accompanied the advancing division of labor and economic integration. The expanding sphere of security, in turn, raised the expected rewards from investment made greater division of labor and economic integration less risky. The simultaneous and non-incremental changes in liberty, commerce, and security allowed the towns to grow and become more powerful.

4. The Theory of Moral Sentiments

In Smith’s Wealth of Nations, equilibrium and comparative static arguments are easy to identify because so many are familiar from modern economics. However, they can be more difficult to identify in his theories about other domains of human behavior. Smith’s approach to moral behavior in The Theory of Moral Sentiments, for example, combines both normative and positive political theory to explain why people behave according to general principles of morality.14

4.1. Equilibrium arguments. Smith begins his explanation for moral behavior with the idea that humans are sympathetic beings; meaning, we can identify and empathize with the feelings of others. According to Smith, “As we have no immediate experience of what other men feel, we can form no idea of the manner in which they are affected, but by conceiving what we

13 Smith describes the growing economic integration in (WN III.iii.20:408-10).
14 A debate exists about whether Smith's arguments are normative, or are they solely “descriptive” (which, per section 2, we call explanatory). See Otteson (2002, ch 6) who reviews of this debate and concludes that Smith's arguments are both. Smith's NPPT argument does not depend on the resolution of this debate; that is, whether Smith makes normative claims about different types of behavior.
ourselves should feel in the like situation” (TMS I.i.1.1-2,9). Sympathy allows us, to a degree, to understand the feelings of others and hence aspect of the basis for their judgments and motivation.

Smith also makes an important assumption about motivation; notably, that people desire approbation from others. As Smith famously wrote, we desire “not only to be loved, but to be lovely,” we seek “not only praise, but praise worthiness,” and we dread “not only to be hated, but to be hateful” (TMS III.2.1:113-14). The drive for approbation generates the incentives for an individual to internalize moral judgments; to gain approbation from others, to be seen as “deserving and obtaining this credit and rank among our equals is, perhaps, the strongest of all our desires,” according to Smith (TMS VI.i.4: 212-13).

Smith explains these incentives in another way. In our search for “love and admiration,” “[w]e must at least believe ourselves to be admirable for what [in others is] admirable.” With respect to our “character and conduct,” we draw “pleasure and contentment” when others see us as we wish to be seen. Further, their reactions confirm our own sense of self-approbation. “Their praise necessarily strengthens our own sense of our own praiseworthiness. In this case, so far is the love of praise-worthiness from being derived altogether from that of praise; that the love of praise seems, at least in a great measure, to be derived from that of praise-worthiness” (TMS III.2.3:114). The incentives—and deterrents—for moral behavior are clear. Punishment for violating moral norms is not confined merely to social disapprobation but is made all the more painful “by the torments of inward shame and self-condemnation.” On the contrary, Smith writes that those same “vicegerents of God within us…always reward obedience with tranquility of mind, with contentment, and self-satisfaction” (TMS III.5.6:166).
The difficulty, however, is that people are self-centered and have trouble judging their own conduct. People naturally prefer themselves to everyone else, “So partial are the views of mankind with regard to the propriety of their own conduct, both at the time of action and after it; and so difficult is it for them to view it in the light in which any indifferent spectator would consider it.” Smith continues, “This self-deceit, this fatal weakness of mankind, is the source of half the disorders of human life” (TMS III.iv.5-6:158). Put simply, self-judgment is an imperfect means for assessing the “morality” of our actions and whether they were “the right thing to do.”

But, as Smith writes, “Nature “has not left this weakness, which is of so much importance, altogether without a remedy; nor has she abandoned us entirely to the delusions of self-love.” People have the ability to observe others, to sympathize with their feelings, to make judgments about their conduct, and to observe others’ reactions to that conduct. They learn to avoid behavior to which everyone expresses “detestation” (TMS III.iv.5-6:158). As Hont (2015:40) explains, people learn social norms and the consequences of failing to follow them.

Smith’s concept of the impartial spectator becomes the lynchpin in understanding how individuals equilibrate on certain moral norms. According to Smith, the capacity to see ourselves impartially is central both to moral behavior and to receiving admiration and approbation from others. The impartial spectator allows us, to a degree, to see ourselves as others see us and hence to judge our thoughts and actions from the perspective of others. Although people are self-centered and largely concerned about themselves, they dare not act solely on this basis. Instead, people must strive to view themselves as others see them; they learn to “humble the arrogance of [their] self-love, and bring it down to something which other men can go along with” (TMS II.ii.2.1, 82-83).

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15 Smith’s impartial spectator has been the subject of significant study; see, e.g., Broadie (2006), Fleischacker (2006, ch 4), Griswold (1999, chs 2-3), Otteson (2002, ch 1), and Raphael (2007).
It is not our task to provide a full reconstruction of the role and importance of the impartial spectator in Smith’s moral theory; suffice it to say, however, that the device of the impartial spectator enables an individual to discern which behaviors bring approbation and which do not. It is through the impartial spectator that Smith states that the “general rules of morality are formed” (TMS III.4.5-10, 159). Furthermore, when “when they are universally acknowledged and established, by the concurring sentiments of mankind,” we argue that these general rules of morality constitute a moral equilibrium: sustained moral behavior that is acting in accordance with one’s impartial spectator (TMS III.4.11:160).

To see that Smith’s arguments support an equilibrium, consider a merchant selling goods to the public in a community that values honesty. A set of customers find it convenient to frequent the merchant. At base, the merchant may wish to cheat as well as he can each customer who walks through his door. But the merchant dare not behave this way because it violates the community’s moral rules, even if the particular manner of cheating is not strictly legal. Smith says,

To abstain from what is another’s was not desirable on its own account… you ought, however, to abstain from whatever belongs to me, because by doing otherwise you will provoke the resentment and indignation of mankind. The security and tranquility of your mind will be entirely destroyed… That other species of justice which consists in doing proper good offices to different persons, according to the various relations of neighbours, kinsmen, benefactors, superiors, or equals, which they may stand in to us, is recommended by the same reasons. To act properly in all these different relations procures us the esteem and love of those we live with; as to do otherwise excites their contempt and hatred. By the one we naturally secure, by the other we necessarily endanger our own ease and tranquility, the great and ultimate objects of all our desires. The whole virtue of justice, therefore, the most important of all the virtues, is no more than discreet and prudent conduct with regard to our neighbors” (TMS, VII.ii.2.9:297).

Cheating and dishonestly are costly to the merchant: it will lead to disapprobation. Further, the merchant will gain a reputation for dishonesty, and he will lose customers to other,
more honest merchants: “to be laying a plot either to gain or to save a single shilling, would degrade the most vulgar tradesman in the opinion of all his neighbours” (TMS III.6.6:173).

Because the merchant can sympathize with his customers through the device of the impartial spectator, the merchant can anticipate the reactions of others. He therefore has incentives not to cheat his customers. The described behavior of both the merchant and the customers constitutes an equilibrium: the merchant has incentives to behave honestly, and his customers return as their needs arise for his products.

We raise a final aspect of Smith's approach to moral behavior, the issue of self-command. He argues that individual success in developed societies depends on two parameters, intelligence and self-command, the latter being the ability to control one’s passions through constant reference to the impartial spectator (TMS IV.2.6:189).\(^{16}\) The “union of those two qualities consists the virtue of prudence, of all the virtues that which is most useful to the individual” (TMS IV.2.6:189).\(^{17}\)

The man of self-command “knows from experience, how few are capable of this self-command, he looks upon our conduct with a considerable degree of wonder and admiration.

\(^{16}\) A qualification should be made, as Smith’s discussion is elaborate: self-command is not mere control of the passions, but rather, the constant identification with the perspective of the impartial spectator to decide what is the right behavior. We explore the role of self-command in the comparative statics of morality in the following pages. Self-command, according to Smith, is embodied in “the man of real constancy and firmness, the wise and just man who has been thoroughly bred in the great school of self-command, in the bustle and business of the world, exposed, perhaps, to the violence and injustice of faction, and to the hardships and hazards of war, maintains this control of his passive feelings upon all occasions…” For Smith, self-command is not a binary, but rather, a learned quality that is acquired over the course of one’s life. So, for the man of great self-command, Smith continues: “He has never dared to forget for one moment the judgment which the impartial spectator would pass upon his sentiments and conduct… This habit has become perfectly familiar to him. He has been in the constant practice, and, indeed, under the constant necessity, of modelling, or of endeavouring to model, not only his outward conduct and behaviour, but, as much as he can, even his inward sentiments and feelings, according to those of this awful and respectable judge. He does not merely affect the sentiments of the impartial spectator. He really adopts them. He almost identifies himself with, he almost becomes himself that impartial spectator, and scarce even feels but as that great arbiter of his conduct directs him to feel” (TMS III.3.25-26:146-47).

\(^{17}\) Smith also says: "The care of the health, of the fortune, of the rank and reputation of the individual, the objects upon which his comfort and happiness in life are supposed principally to depend, is considered as the proper business of that virtue which is commonly called Prudence" (TMS VI.i.5:213).
Hence arises that eminent esteem with which all men naturally regard a steady perseverance in the practice of frugality, industry, and application, though directed to no other purpose than the acquisition of fortune” (TMS IV.2.8-9:189-90). People naturally vary in their self-command. Only a small group has perfect self-command (TMS IV.2.9:190).

It is worth underscoring one point. The mechanism of the impartial spectator is not simply a normative argument about what one ought to do, but a positive model about how moral behavior is learned and sustained. As a component of Smith's application of equilibrium and comparative statics, the idea of impartial spectator demonstrates how it is that a certain normatively desirable outcome—namely, moral behavior—can be achieved with a positive model that starts with a simple assumption that individuals seek social approbation. An understanding how moral behavior could be sustained was an inquiry “not concerning a matter of right, but concerning a matter of fact” (TMS III.5.6, p. 77). Our aim here is to show how these “matters of fact” come in a certain form of positive models—namely, equilibrium models—that ultimately explain normatively-desirable outcomes. In the next section, we highlight a few of the instances in which Smith explains the conditions under which these outcomes can change.

4.2. Comparative static arguments. Although equilibrium arguments are more central to Smith's main purpose in Theory of Moral Sentiments, this work also contains several comparative statics arguments. To motivate these examples, it may be helpful to frame them as a question: How do certain types of moral behavior differ across circumstances and in response to changes in circumstances?

Smith raises an aspect of self-command in the form of a comparative statics on equilibrium moral behavior. In Smith's words, “The degree of the self–approbation with which every man, upon such occasions, surveys his own conduct, is higher or lower, exactly in
proportion to the degree of self-command which is necessary in order to obtain that self-approbation” (*TMS* III.3.26:147). Higher levels of self-command generate higher levels of self-appropriation.

Consider the merchant-customer equilibrium discussed above in the context of self-command. Merchants of impeccable self-command are the most honest. Smith argues that a person is more likely to be admired and hence receive approbation for honesty if she becomes an honest person than if she merely attempts to simulate an honest person. Of course people, merchants included, vary in their degree of self-command. Only persons with a high degree of self-command can become known for being an honest person. Smith's discussion of self-command implies that merchants with lower degrees of self-command will behave less honestly. A merchant dominated by an avaricious manner, for example, may find it too difficult to reframe from cheating that he soon has no customers and must close his shop (*TMS* III.6.6:173). The comparative statics logic holds: the higher the merchant’s degree of self-command, the more honest and hence the better the reputation.

Taking a step away from any specific virtue, though, we might ask, “What other conditions exist that influence an individuals’ commitment to moral behavior?” Are some people just better at following the perspective of the impartial spectator than others by an accident of birth? Smith does in fact suggest a comparative statics of the impartial spectator to answer this question. An important characteristic differentiating people is the level of self-command. As Smith writes, “The degree of the self-approbation with which every man, upon such occasions, surveys his own conduct, is higher or lower, exactly in proportion to the degree of self-command which is necessary in order to obtain that self-approbation” (*TMS* III.3.25-26,146-47). People with less self-command have a lower ability to internalize admirable qualities and to follow
moral precepts; they are therefore less likely to approve of their own behavior as well as receive approval from others.

Take the virtue of benevolence. Smith argued in *TMS* that individuals are motivated by self-interest tempered with benevolence (*TMS* VI.i.1.17-18:224-25, VI.i.3.1-6:235-37; and VI.i.1.1-10: 219-22), but benevolence is not universal, unqualified, or random. Benevolence arises from affection and habituated sympathy, sympathy that arises through repeated interaction and closeness and which is stronger in some relationships than in others. Thus, we might say that benevolence and habituated sympathy depends on familiarity between actors. In Smith's words, habituated sympathy is strongest amongst immediate family, among whom it is “naturally and usually the persons upon whose happiness or misery his conduct must have the greatest influence. He is more habituated to sympathize with them” (*TMS* VI.i.1.1:219). After family, a typical ranking is: next for their close friends, then professional relationships, acquaintances, and last strangers. Individuals therefore exhibit varying degrees of benevolence, in descending order through this list. Put in comparative static terms, this “familiarity principle” holds that the amount or degree of benevolence exhibited by an individual toward another increases with the degree of habituated sympathy. For any degree of familiarity of one individual toward a second, the first individual makes choices based on a mix of her own welfare and that of the second person. As familiarity increases, she becomes more benevolent toward the other person (Otteson 2002: 183-89; Fleischacker 2004: 66-68).

A final example also reflects exogenous forces that affect an individual’s commitment to moral behavior. Smith claimed that highly religious individuals are more likely to commit themselves to moral behavior; his logic takes the form of a comparative statics logic that makes religious belief a parameter of interest. A religious individual’s faith in the afterlife can be seen
as embodying the ultimate rewards of eternal heaven or hell. This faith can be interpreted as a set of greater rewards—or punishment—in an afterlife, and so “they necessarily acquire a new sacredness from this consideration… [that] the very thought of disobedience appears to involve in it the most shocking impropriety” (TMS III.5.12,170; see also TMS II.i.3.12:91). The logic here, then, is that the addition of religious beliefs engages an additional force along side of an individual’s capacity for self-approbation (and self-disapprobation); her motives to behave morally are even stronger. All else constant, a person of religious beliefs will choose morally on more occasions.\(^\text{18}\)

In sum, the ideas highlighted here reveal Smith’s explanation why self-interested people have reason both to conform to their community’s moral standards and to internalize them. Harnessing the power of the impartial spectator underpins an equilibrium, namely, the coordination of individuals in a community around moral behavior. The comparative static arguments involve in various circumstances or parameters that make equilibrium moral behavior stronger or weaker.

The reason we call these equilibrium and comparative statics arguments is because Smith builds each case from a set of fundamental assumptions about human behavior. The incentives to act according to the general principles of morality arise from an innate desire to win the approbation of others, to seek peace of mind and our own self-approbation, and to avoid the psychological pain and inner-torment that result from failing to behavior morally. Smith assumes that, all else constant, such general rules of how moral behavior arises in all communities, even if the specific moral precepts differ substantially across communities. Smith is not a moral relativist; rather, he is a moral theorist who revealed how different people could

\(^{18}\) This principle is known as the “afterlife as a disciplinary device” in the new economics of religion. See e.g., Gorski (2003) and Richardson (2005).
derive principles of moral behavior in the same way, even as their moral standards differ. By way of building positive models to illustrate how certain normative goals could be achieved and sustained, Smith’s moral science employed the same tools as his science of political economy.

5. Smith's “Considerations Concerning the First Formations of Languages”

In his essay entitled “Consideration Concerning the First Formations of Languages” (1761), Smith advanced a model of the language stability, and presents hypotheses about the evolution of language using the logic of equilibrium and comparative statics. Communication is, at its heart, a classic example of a coordination problem (Laitin 1994): what sounds should correspond to what objects, actions, modifiers, and ideas? In order to be understood, people “endeavour to make their mutual wants intelligible to each other, by uttering certain sounds, whenever they meant to denote certain objects” (“Languages” 1:203). Thus, a unified, agreed-upon language solves the coordination problem by assigning a shared sense of meaning in the form of a connection between sounds and meaning amongst a given community.

As in most complex coordination games, there exist multiple equilibria; that is, no unique means exist to solve the complex language-coordination game. Even the simplest coordination games, such as which side of the road to drive on, has two equilibria: all drive on the right; all drive on the left. The existence of so many different languages underscores this point. Because

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20 Smith has a simple narrative of how a set of people arrive at a language equilibrium, but it questionable and fails to explain how a language equilibrium qua complete language emerges from this process. We therefore focus on Smith's argument about how a given language solves the coordination problem and produces an equilibrium.
so many different languages exist that solve this same problem, no natural solution to the coordination problem exists.

How, then, is any one language an equilibrium? Smith shows that members of a community face both positive and negative incentives to adhere to a single language. On the positive side, an individual who uses the community’s language benefits from the ease of communication with others. On the negative side, Smith explains, punishment mechanisms exist for deviation from standard usage. Many of Smith's illustrations involve parents correcting children, but adults naturally correct one another as well. Smith mentions that people are embarrassed when they make improper uses of the language, so they pay a “penalty” for a modest deviation in the form of social embarrassment (“Languages,” 33:220). Individuals who make substantial deviations by failing to use the community’s language pay a large price – they cannot be understood.21

We thus see the reasons why adherence to their community’s language is an equilibrium; for the same reason that people have incentives to drive on the same side of the road that everyone else drives on, it is very costly to a member of a community who deviates from the community’s language. Taken together, the positive and negative incentives just described imply that each individual in a community has incentives to use the community’s language, thus sustaining the coordination equilibrium. If, as Smith says, the value of language is to

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21 Otteson (2011) describes this equilibrium: “For, first, there are rules of language. Language is not an anarchy with each person making things up for himself. Second, at any given time, most of the rules are commonly accepted; no debate is expected or even allowed. And third, infractions of the rules are usually noticed and frequently punished. Smith tells, for example, of the child learning to speak correctly: “A child that is just learning to speak, calls every person who comes to the house its papa or its mama” (“Languages,” 1:204); and “A child speaking of itself, says, Billy walks, Bill sits, instead of I walk, I sit.”
communicate, to make ourselves understood, then significant deviations from a community’s language make the deviator worse off.22

Languages are dynamic, not static, features of human life, though, and Smith implicitly recognizes this fact in his use of comparative statics arguments about language. For example, Smith argues that languages evolve in everyday life as circumstances and needs of the community change, typically in incremental ways that most people never notice. In describing the growth of language, Smith explains that “their necessary occasions obliged” that people add or make minor alterations to the language (“Languages,” 1:204). The third lecture in LRBL focuses on language and is in the form of a conjecture about the evolution of language. Smith devotes most of the lecture to suggesting how, as new circumstances arise that necessitate expression of new ideas, new words and new figures of speech emerge (LRBL, i.17-34:9-13). In other words, the coordination equilibrium evolves as circumstances arise that require changes in word usage.

As a second illustration, Smith presents an extended example in “Languages” about what happens when two “nations” with different languages mix (“Languages” 33:220-21). He begins with two different “original” languages, each with complex forms of declensions and conjugations. Smith asserts that people who learn such a language from infancy can master it, “As long as any language was spoke by those only who learned it in their infancy, the intricacy of its declensions and conjugations could occasion no great embarrassment” (“Languages” 33:220). But most adults who attempt to learn this sort of language find it too difficult to master. For

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22 To many, the idea that language is a choice is ludicrous. Few who speak a language consider deviating. True we argue, but this reflects the compelling nature of the equilibrium forces. As Laitin (1994) observes, a surprisingly large number of situations exist where people must choose among different languages. A Dutch person living in New York City must speak English; because the Dutch community in New York is so small, no person can get by speaking Dutch alone. In contrast, the immigrant Mexican communities in some areas are so large that some individuals can survive without learning English.
this reason Smith argues that when two nations intermix, due to conquest or commercial interactions, language evolves into a simpler form with fewer declensions and conjugations that is easier for adult members of both nations to master.

As in the earlier cases of political economic development, and moral behavior, Smith’s account of languages begins with a set of assumptions about human motivation, and builds an argument about how and why certain outcomes are sustained—in this case, how and why people coordinate around the use of a language. Furthermore, his examples illustrate conditions under which logical deviations from this equilibrium arise, reflecting comparative statics arguments. Taken together, Smith's equilibrium and comparative statics arguments illuminate our understanding of a key feature of human society, namely, the organization and evolution of languages.

6. Conclusion

In this paper, we have posed four interrelated arguments. First, we argue that equilibrium and comparative statics arguments can be identified throughout Adam Smith’s entire corpus. Equilibrium arguments explain how and why certain political, economic, and social outcomes are stable; comparative statics arguments explore the conditions under which these outcomes change in response to changing circumstances. The logic of equilibrium and comparative statics afforded a method that allowed Smith to go beyond narrative and the reporting patterns of behavior. He used this method to explain why some patterns of behavior are stable in some periods or under some circumstances; why patterns change in particular circumstances; and why behavior varies in different contexts. Viewing Smith's history of Western Europe from this lens demonstrates that it is far more than a narrative. Focusing on many of the major events, Smith
uses equilibrium and comparative statics to explain them. Topics include the long-term stability of feudalism; the escape of towns from the feudal equilibrium; the sustained monopoly of the medieval Church and its breakdown in the Reformation; and the nature of the British Empire.

Second, we argue that this method of using equilibrium and comparative statics arguments speaks to the contents of the missing second book on law and government. Drawing on the literature in combination with the student notes on Smith's *Lectures on Jurisprudence*, we believe that the substance of the work would have covered familiar subjects including, but not limited to the escape from the feudal order, the growth of the division of labor, emergence of liberty and the rule of law in England, and the emergence of nascent market societies. Such content is consistent with the existing literature. However, we further argue that it is not merely the substance, but more importantly, the *method* of this work that bears significant implications for the interpretations of Smith’s corpus as a whole. Equilibrium and comparative statics models abound in Smith’s extant works; in order for this missing second book to have truly “fit” into Smith’s larger project, such models would have been pervasive in his work on the general principles of law and government as well.

Third, we hope to have demonstrated how the equilibrium and comparative statics arguments throughout his corpus speak to his “systemization of theoretical thinking” in both political economy in the processes by which individuals are socialized, become attached to political institutions, and acquire and sustain a sense of justice. Smith’s project not only derives positive, general principles that run through these dynamic and diverse processes, but also evokes the normative outcomes that *ought* to be achieved should the positive conditions hold.

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23 Recall Smith’s characterization of the feudal equilibrium, “[T]he occupiers of land in the country were exposed to every sort of violence. But men in this defenceless state naturally content themselves with their necessary subsistence; because to acquire more might only tempt the injustice of their oppressors” (*WN* III.i.12:405).
(Phillipson 2010: 2). The equilibrium and comparative statics methods we have explored in this paper exemplify this uniquely Smithian method; they allow Smith to identify not just patterns and associations in these processes, but also to explain why these patterns were stable and why, under some circumstances, they changed.

Finally, our approach lends greater credence to the notion of an integrated Smithian project that extends beyond the realm of economics—despite our use of contemporary economic terminology. Smith was singular in his approach to outlining the principles that governed human society—everything from what makes individuals act morally, to what makes certain countries flourish (Phillipson 2010: 2). In addressing these questions, Smith consistently relied on the premise of self-interested individuals, tempered in various ways (such as the systematic role of benevolence as a function of habituated sympathy).

Smith’s reliance on this assumption does not confine his contribution to economics. Smith sought to understand cooperation and conflict across the three distinct, yet interrelated domains of human behavior, and his major works capture those domains aptly: *The Theory of Moral Sentiments* as the work of the “moral” and “social” realm, the *Wealth of Nations* devoted to the “economic” realm, and the so-called missing book on Jurisprudence devoted to the realm of politics, government, and the law. Our account of Smith’s arguments from across his different works illustrates their overlapping nature: achieving a new equilibrium of the commercial society required a change in the conditions of political bargaining; the formation and stability of language is inseparable from our desire to be approved of for following certain norms. The force of this paper is that Smith uses equilibrium and comparative static techniques in his discussions of each of these realms, thereby representing an important aspect of unity in his approach.

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24 Many scholars in the literature discuss Smith's integrated project, including Fitzgibbons (1995), Griswold (1999), and Fleischacker (2006).
Taken as a whole, then, Smith’s works prove that a systematized approach to the study of human nature and human history was more than possible—it was profoundly enlightening.

Appendix 1: A Short List of Equilibrium and Comparative Statics Ideas in the *Wealth of Nations*.

- A “publack mourning raises the price of black cloth,” not to mention the wages of journeymen tailors. [WN I.vii.19:76]
- The discovery and mining of new world silver lowered the price of silver. [WN I.xi.e.32:207]
- Regulatory restrictions on employment, such as apprenticeship statutes, lower wages. [WN I.vii.28:79]
- Granting a firm a monopoly raises prices above free competition. [WN I.vii.26-27:78-79]
- An improvement in the skill of labor lowers the cost of production. [WN I.vi.6:17-18]
- The “price of necessities of life” become “exorbitant” “during the blockade of a town or in a famine.” [WN I.vii.9:74]
- “It is not the actual greatness of national wealth, but its continual increase, which occasions a rise in the wages of labor… England is certainly, in the present times, a much richer country than any part of North America. The wages of labour, however, are much higher in North America than in any part of England.” [WN I.viii.22:87]
- The relative bargaining power of masters relative to laborers lowers wages relative to what would occur if labor possessed equal bargaining power. [WN I.viii.12-13:83-84]
- The high price of overland transportation relative to water transportation means that far more goods are transported between two towns with access to waterways than if no reasonable water route exists between them. [WN I.iii.3:32-33]
- Countries with “tolerable security” lead to much more accumulation of stock and investments than “in those unfortunate countries, indeed, where men are continually afraid of the violence of their superiors, they frequently bury or conceal a great part of their stock.” [WN II.i.30-31:284-85]
- As agriculture develops, “rent, though it increases in proportion to the extent, diminishes in proportion to the produce of the land.” [WN II.iii.9:334]
- Remuneration for effort affects how hard people work: “Our ancestors were idle for want of a sufficient encouragement to industry. It is better, says the proverb, to play for nothing, than to work for nothing. In mercantile and manufacturing towns, where the inferior ranks of people are chiefly maintained by the employment of capital, they are in general industrious, sober, and thriving; as in many English, and in most Dutch towns.” [WN II.iii.12:335]
- War lowers economic growth. [WN II.iii.5:345]
- Mercantile restrictions that require a country’s trade to be carried in ships from that country increase the supply of sailors and hence lower the costs of war. [WN II.v.30:371]
- The medieval Church’s monopoly was stable for several centuries, yet it lost this monopoly due in part to the clergy’s demand for luxury. [WN V.i.g:788-814]
- A wide variety of restrictions on trade raise the price of goods and lower the quantity available:
  - Restrictions on the export of gold. [WN IV.i.9:433]
  - The monopolization of trade lowers the public benefits of trade. [WN IV.i.33:448-49]
  - “Restraints upon the importation from foreign countries of such good as can be produced at home.” [WN IV.ii.1:452]
- Attempts to manipulate the balance of trade. [WN IV.iii.c.1ff.488ff]
- Various forms of subsidies to exporters, such as bounties [WN IV.v.2ff:505ff] and drawbacks [WN IV.iv.1-2ff:499ff].
• The discovery of America improved the “real revenue and wealth” of Europe. [WN IV.i.32:448]

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All references to Adam Smith’s works are to the Glasgow edition, as reprinted by Liberty Fund.

The text uses the following abbreviations.


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