

# 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.

## 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.<sup>2</sup> Many scholars seek to understand his corpus by speculating about the so-called “missing second book” on jurisprudence that Smith promised at the end of his *The Theory of Moral Sentiments (TMS)*

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<sup>2</sup> In brief, “Das Adam Smith Problem” was a conceptual debate amongst Adam Smith scholars that dates to late 19<sup>th</sup>-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*. For more on the historiography of “Das Adam Smith Problem,” see Teichgraeber (1981), Dickey (1986), and Montes (2003).

but never completed. Seemingly, this missing book was to have bridged *TMS*<sup>3</sup> and the *Wealth of Nations* (*WN*), drawing on ideas developed in his lectures on jurisprudence.<sup>4</sup>

An alternative and less common approach has been to analyze Smith's social scientific *methodology* rather than the substantive content of his work. Henderson (2006:117-18) shows that Smith carefully uses the logical "if/then" form of analysis to state many propositions. 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" (see, e.g., Berry 2006, Montes 2006, and Skinner 1996b). Blaug (1992:52) for example, 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."<sup>5</sup> 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."<sup>6</sup>

This paper contributes to the debate over unity in Smith's corpus by emphasizing a pervasive methodological unity throughout Smith's work, 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.

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

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<sup>3</sup> Abbreviations for Smith's work are explained below at the beginning of the references.

<sup>4</sup> 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 Teichgraber (1986).

<sup>5</sup> See also Endres (1991; 76-77). Hollander (1973,ch 2), Milgate (1987), Milgate and Stimson (2009:78-87).

<sup>6</sup> 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.

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 Weingast 2015a). 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 2015b).

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.<sup>7</sup> Although 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

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<sup>7</sup> 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 (*LRBL* Error! Main Document Only.ii.135-36:146-47).

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 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.

Both arguments involve *normative and positive political theory* (NPPT). Traditional normative political theory (NPT) focuses largely the normative aspects of an issue; while positive political theory (PPT) focuses largely on the positive aspects. NPPT combines these two generally independent arguments; for example, providing a positive model to show how a set of normative principles are sustained in practice.. Smith's pervasive use of equilibrium and comparative statics in this NPPT framework affords not only new insights into the possible contents of the missing second book, but moreover, the nature of Smith's larger, tripartite project. 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 the Enlightenment project of developing a new "Science of Man.

This paper proceeds as follows. First, we describe the equilibrium and comparative static methods using examples from modern economics; and we explain how these methods can be identified in Smith's works. We then highlight Smith's application of these techniques across a wide range of subjects: economics (Section 3), political economic development (sections 4), morality (section 5), language (section 6), and Smith's proposal for a resolution of the "Contest

with America” (section 7). We close the paper with a discussion of the implications of our approach for Smith's missing second book.

## 2. Preliminaries: Equilibrium and Comparative Statics

Before demonstrating that Smith used equilibrium and comparative static techniques, we first define them. In brief, equilibrium analysis involves two components: first, describing a pattern of behavior generated by the interaction of people and organizations; and second, showing why the individuals involved have incentives to behave in a manner that preserves the pattern. For an equilibrium to exist, we must show that, given the behavior of others, no one has an incentive to deviate from the equilibrium pattern of behavior.<sup>8</sup>

To illustrate these concepts, consider the interaction between a buyer and seller. 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, 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. 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—and take as given the strategies of all the other individuals relevant to the interaction, the *equilibrium* strategy of each actor (the buyer and seller in this example) is the one that does best according to the actor's specified goals, taking the other's strategy as given. Put simply, in an equilibrium, none of the relevant actors has

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<sup>8</sup> A debate exists about whether Smith fully grasped the modern concept of equilibrium (cites). Regardless of the answer to that question, he clearly understood the basic principle and provided a great many arguments that we now recognize as equilibrium ones.

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.

Comparative statics results arise when we consider the effect of a change in one of the exogenous parameters held constant in the equilibrium analysis. The comparative static results characterize how an equilibrium shifts in response to the change in parameters. Returning to the marketplace illustration, consider the buyer's strategy choice. 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 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.<sup>9</sup>

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<sup>9</sup> As an example, consider Adam Smith's observation that prosperity means men are much less likely to train and to fight, hence republics get weaker (*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 (*LJ(A)* iv.93:235). Smith's discussion is not an equilibrium model 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.

A final point about equilibrium and comparative statics analysis involves its relationship to dynamics.<sup>10</sup> Smith often focuses on the process of competition, emphasizing dynamic and evolutionary arguments rather than equilibrium ones; at times, he uses both approaches in the study of particular phenomenon. In emphasizing the ubiquity of equilibrium and comparative statics, we mean that Smith uses these methods on virtually all topics he studies at length; we do not imply that these were his sole analytical methods.

### 3. Equilibrium and Comparative Statics in Smith's Economics

Equilibrium and comparative static arguments abound in the *Wealth of Nations*, and they are perhaps most apparent in Smith's discussion of supply and demand. First consider a competitive market in equilibrium. If a seller wants more revenue and attempts to raise his price above the equilibrium price, buyers will go elsewhere to obtain the good at the equilibrium price. Instead of receiving more revenue by raising his price, the seller loses revenue and his customers who went elsewhere to buy the product. The same argument holds, *mutatis mutandis*, for a buyer who wants to pay less than the equilibrium price. Similarly, if the market price is above the equilibrium price, there is excess supply in the sense that sellers will offer more of the good at the above-equilibrium price than buyers wish to purchase. Sellers in this setting, especially those with too few buyers, have incentives to lower their prices to increase their sales. This process leads the market to equilibrate – that is, to move or return to the equilibrium price.<sup>11</sup>

Next, consider comparative statics. Smith opens chapter I of Book I of the *Wealth of Nations* with the following comparative static argument about the division of labor. Consider a

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<sup>10</sup> A range of scholars study Smith's approach to process and dynamics going back at least to Young (1928). More modern students of this aspect of Smith's work include Buchanan and Yoon (1994), Evensky (2005), and Myint (1948, especially chs I and IV).

<sup>11</sup> Smith discusses these points in *WN* I.vii.1-15;72-75. Ekelund and Hébert (2007:\*\*) discuss this model at greater length.

market in equilibrium. Neither buyers nor sellers have an incentive to change the price or quantity of the goods they exchange. Now, consider an increase the division of labor. Smith argues that the quantity produced of a given good increases and its price falls (*WN* I.i.1-10:13-22). Similarly, in book I, chapter III, Smith famously explains how “the division of labor is limited by the extent of the market.” Hence another comparative static arises: the larger the extent of the market, the greater the division of labor.

Smith’s theory of wages – part of what is now called labor economics – relies on five sets of comparative statics to explain the differences in wages across different types of work. If one line of work is more dangerous than a second, then the market wages in the first line should be higher than those in the second (*WN* I.x.b.1:116-17). The same logic applies if one line of work requires more human capital or has a greater risk of success. 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). These comparative static results hold for every market, assuming a reasonable system of justice and that wages are not artificially constrained by law.

Smith's explanation for differences in land rents has a similar logical structure. Comparative statics arguments explain why land rents are higher when the land is more fertile or when it has access to cheap means of transportation to markets (*WN* I.xi.b.5:163). Again, these general principles or comparative static results hold, *ceteris paribus*, in all markets economies.

Many of Smith's comparative statics examine the effects of various policies and regulation. For example, Smith presents a non-obvious comparative static about the effect of the Poor Laws on wages. In 1601, Parliament enacted legislation requiring that “every parish should

be bound to provide for its own poor... By this statute the necessity of providing for their own poor was indispensably imposed upon every parish” (WN I.x.c.46-47:152-53). Smith reports that this law greatly restricted the movement of the poor. Under the new law, individuals could establish residency in a new location only under certain conditions, such as vouched for employment or sufficient funds to pay a specified level of rent. According to Smith:

No independent workman, it is evident, whether labourer or artificer, is likely to gain any new settlement either by apprenticeship or by service. When such a person, therefore, carried his industry to a new parish, he was liable to be removed, how healthy and industrious soever, at the caprice of any churchwarden or overseer (WN I.x.c.54:154).

By restricting labor mobility, the 1601 law limited the ability of markets to respond to wage disparities through labor migration from low wage areas to high wage areas. Smith argues that the poor laws therefore created large disparities in wages in places near each other:

The very unequal price of labour which we frequently find in England in places at no great distance from one another, is probably owing to the obstruction which the law of settlements gives to a poor man who would carry his industry from one parish to another without a certificate (WN I.x.c.58:156).

Smith used comparative statics on a historical example to argue against regulations that limit the responsiveness of the market to changes in supply and demand; in his approach, “unnatural” market regulations—even if motivated by good intentions—made people worse off.

As another illustration, consider Smith’s argument about the introduction of money as a medium of exchange. Without money, barter exchange is very costly and difficult; to use a modern phrase, barter exchange involves *high transactions costs*. Smith illustrates the costs of exchange in the following way:

when the division of labour first began to take place, this power of exchanging must frequently have been very much clogged and embarrassed in its operations... The butcher has more meat in his shop than he himself can consume, and the brewer and the baker would each of them be willing to purchase a part of it. But they have nothing to offer in exchange, except the different productions of their respective trades, and the butcher is already provided with all the bread and beer which he has immediate occasion for. No

exchange can, in this case, be made between them. He cannot be their merchant, nor they his customers (*WN* I.iv.2:37).

Smith then explains how the introduction of money as a medium of exchange and a store of wealth solves these problems, facilitating exchange, the advancement of the division of labor, and general opulence (see especially *WN* I.iv.1-18:36-56).

The number of economic comparative statics results in the *Wealth of Nations* is so numerous that it would be impossible to discuss them all here. A summary list of equilibrium and comparative statics arguments captures most of them below.

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**Table 1: Equilibrium and Comparative Statics Ideas in the *Wealth of Nations*.**

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- A “publick 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.i.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]
- 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]

This list reveals the prevalence and diversity of Smith's economic comparative static arguments.

One final note. 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. Broadly speaking, the concept connoted a stable balance of forces in which there exists no tendency to deviate, very similar to the idea formalized in a Nash equilibrium. 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). For example, even though Smith himself does not use the term, “equilibrium,” in his price theory, the “configuration of values (relative prices)” forms the “center of gravitation” of his economic system.

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 as we introduce in this paper, comparative statics—are part of Smith’s “central organizing category around which economic theory was to be constructed,” (Milgate and Stimson 2009: 86) and become tantamount to the crystallization of economics as a *science*.

We also observe that the concepts of equilibria and comparative statics have been underexplored in areas *outside* of economics. Therefore, we demonstrate how Smith’s adaptation of such concepts throughout his corpus speaks to not only a unifying methodology, but a unified *project*. In the following sections, we elaborate on the various contexts in which such equilibria and comparative statics arguments appear throughout Smith’s corpus.

#### **4. 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 economic phenomena; 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, and others revert to earlier stages of development. This section explains (i) Smith's analysis of feudalism as an equilibrium with low growth; and (ii) the escape from this equilibrium by the towns as a comparative statics.<sup>12</sup>

**4.1. The feudal equilibrium following the fall of Rome.** In one of his principal contributions to jurisprudence and the political economics of development, Smith asks why so

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<sup>12</sup> The analysis in this section draws on the more extensive treatment of these issues in Weingast (2015a), in turn drawing on Aspromourgos (2009,ch 5), Kennedy (2010,ch5), Skinner (1975), Winch (1978,ch 4).

many societies remain undeveloped: “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. The causes of this may be considered under these two heads, first, natural impediments, and secondly, the oppression of civil government” (*LJ(B)* 521). In answer, Smith explains why feudalism was an equilibrium with low growth and little opulence.

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 – became more risky and vulnerable. At this time, no government could provide security. 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 tenants” (*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 one of violence, predation, and little 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:

[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.iii.12:405).

In sum, the violence and predation of feudal Europe inhibited economic development:

In a rude state of society there are no great mercantile or manufacturing capitals. The individuals who hoard whatever money they can save, and who conceal their hoard, do so from a distrust of the justice of government, from a fear that if it was known that they had a hoard, and where that hoard was to be found, they would quickly be plundered (*WN* V.iii.9:911).<sup>13</sup>

Smith argues that independence in this environment required that individuals and groups be powerful – that is, they needed to possess their own violence potential to protect themselves from the violence of others. If they did not possess power, survival forced them to ally with a powerful group (*WN* III.iii.8:401).

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.

Consider Smith's discussion about primogeniture, a restriction on property rights during feudalism. Smith explains the role and stability of this restriction on the basis of how it improved the feudal lords' ability to project force and maintain security.<sup>14</sup> Primogeniture requires that the first-born son inherit the family estate; it therefore precludes both the equal division of an estate among all sons and, more generally, the ability of the landholder to devise property by will. Although this restriction is very costly in the developed commercial economy, hindering the progress of opulence, it was highly valuable for security in the violent feudal environment:

The law at that time ... did not provide, nor indeed could it, for the safety of the subjects. Each principality ... provided for its own defence... In this state a small property must be very insecure, as it could not defend itself and must be entirely dependent on the assistance of some of the neighbouring great men... [A]s the only security in the other case was from the strength of the possessor, small property could be in no security (*LJ(A)* i.130-31,55).

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<sup>13</sup> In contrast, where justice flourishes, so too does economic development (*WN* V.iii.7:910).

<sup>14</sup> Henderson (2006,ch8) provides a careful reading of Smith's discussion of primogeniture.

Smith explains the main implication, reminding the reader of “those disorderly times”:

When land, like moveables, is considered as the means only of subsistence and enjoyment, the natural law of succession divides it, like them, among all the children of the family... But when land was considered as the means, not of subsistence merely, but of power and protection, it was thought better that it should descend undivided to one... The security of a landed estate, therefore, the protection which its owner could afford to those who dwelt on it, depended upon its greatness. **To divide it was to ruin it, and to expose every part of it to be oppressed and swallowed up by the incursions of its neighbours** (*WN III.ii.3:382-83*, emphasis added).<sup>15</sup>

The paramount nature of security forced feudal lords to adopt property rights that furthered this end, even at considerable expense of efficient production.

The same logic applies to entails, which settle or limit the succession to land. In the feudal system, “entails are the natural consequences of primogeniture. They were introduced to preserve a certain lineal succession, of which the law of primogeniture first gave the idea, and to hinder any part of the original estate from being carried out of the proposed line either by gift, or devise, or alienation; either by the folly, or by the misfortune of any of its successive owners” (*WN III.ii.5-6:384*).

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 because it risked being plundered. Violence drove the form of political exchange creating rights in land; 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 2015). The agrarian feudal system failed to take the path to

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<sup>15</sup> See Weingast (2015a) for the logic of entails and also of wardship.

economic development, and no one in the feudal system had an incentive to deviate from their strategy.

**4.2. The emergence of towns and a new equilibrium.** How did Europe emerge from the feudal equilibrium and begin the transition to a developed economy? Smith's answer involves the rise of towns with their very different economic, political-legal, and military organization. Initially, towns were small and lacked power. Traders were often "slaves" subject to the violence of local lords and king alike (Winch 1978,77). According to Smith, the towns suffered from a similar problem of lawlessness and violence as the feudal lords:

[A]t this time there was little encouragement for manufactures. The lawless and disorderly state of the country rendered communication dangerous, and besides there was little demand for any of the produce of the mechanick. There were therefore but few of them in the country and very small towns. The tradesman or merchant in a country in that state would be altogether helpless. They were generally slaves of some lord, or if they were poor freemen they became dependents either on the king or on some great lord, according as their lands lay most contiguous and were best able to afford them protection and liberty. By this means they were very little better than villains or slaves of these great men (*LJ(A)* iv.142-43:255-56).

Reflecting a critical political exchange between the towns and the king, towns were able to escape the feudal equilibrium of violence and low growth. 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 the towns to secure their own laws and justice, to build walls and defend themselves, and to enter long-distance trade (*WN III.iii.8-9:401-02*).

The political exchange between king and town allowed the towns to escape the feudal violence trap-equilibrium through a simultaneous, threefold revolution in (i) liberty: a political system capable of establishing and enforcing strong property rights, contracts, and the rule of law; (ii) commerce: the growth of domestic markets and long-distance trade affording growing

specialization and hence the division of labor; and (iii) security: the protection from external enemies. In Smith's words:

Order and good government, and along with them the liberty and security of individuals, were, in this manner, established in cities at a time when the 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. On the contrary, when they are secure of enjoying the fruits of their industry, they naturally exert it to better their condition, and to acquire not only the necessaries, but the conveniencies and elegancies of life. That industry, therefore, which aims at something more than necessary subsistence, was established in cities long before it was commonly practised by the occupiers of land in the country (*WN III.iii.12:405*).

The towns' independence, growth, and ability to collaborate with the king were founded on 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 and reverted back to a state of continual violence and low growth.<sup>16</sup> However, increased military capacity and security from plunder fostered long-distance trade and increasing wealth of the towns, allowing the towns to extend their political, economic, and military reach into the local countryside.<sup>17</sup>

Smith's discussion of the transition to the commercial society explains how the form of property rights in land changed in the form of a comparative static argument. 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

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<sup>16</sup> 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*).

<sup>17</sup> "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 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*).

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 states that, as the mode of subsistence (agriculture versus commerce) changes, so too does the optimal rules of property.

Moving beyond property rights, Smith also makes a range of arguments about why important social features vary with the means of subsistence, including the difference between the feudal equilibrium and the commercial society. These features include manners, family structure, property rights, law, morals, and virtue. Smith argues that the nature of each of these social features is endogenous to the stage of history (as Berry 2001 makes clear for members of the Scottish Enlightenment in general). As the means of subsistence changes, so too does each of these social features.

With respect to the family, Smith addresses the question of why the head of the family has the right to rule the extended family. Prior to the rise of government that could provide security, the family was an important source of security. Security, in turn, required a clear line of command so as to prevent coordination problems that would threaten the family and their community's ability to maintain security. In Smith's words,

The rights which arise from the relations which may subsist in a family are as I observed before of 3 sorts: they belong either to a person as being husband or wife; 2<sup>dly</sup>, as father or son; and lastly, as master or servants. I have already considered the two former, and come now to consider the third relation which subsists in a family, viz that of master and servant.

The same reasons which established the authority of the father of the family over the other members of it hold in a great measure with respect to the servants. The head of the family is the person on whom the others are all naturally in a great measure dependent for their support and defence. The government in most early periods of society, when it is in a very weakly condition, is necessitated to establish jurisdictions in the different parts of the country; they can find no other method which will be sufficient to keep the subjects in due subjection and in any tollerable order. The same thing will incline them to commit great authority over the other members of the family into the hands of the head of it, and to strengthen his power over them, as they can discover no other method of bringing them

under the authority of any sort of government. This gives the head of the family always a very great power over the other members of it in all early times (*LJ(A)* iii.175-76; see also iii.86-87).<sup>18</sup>

In contrast, consider the commercial society. In this society, the government provides security, so people do not generally need to rely on family for security. In this world, the father no longer rules the entire extended family; and people often lose track of their extended family (cites).

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 superiority 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. As security increased, the higher expected rewards from investment made greater economic integration less risky.<sup>19</sup> The simultaneous and non-incremental changes in liberty, commerce, and security allowed the towns to grow and become more powerful.

## ***5. The Theory of Moral Sentiments***

In his economic applications in Smith's *Wealth of Nations*, equilibrium and comparative static arguments are easy to identify because so many are familiar from modern economics. They are

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<sup>18</sup> See also *TMS* VI.ii.1.12-13,222-223.

<sup>19</sup> Smith describes the growing economic integration in (*WN* III.iii.20:408-10).

sometimes more difficult to identify in his explanation in other domains of human behavior. Smith's approach to moral behavior in *The Theory of Moral Sentiments (TMS)*, for example, combines both normative and positive political theory to explain why people behave according to and sustain certain normative principles.<sup>20</sup>

**5.1. 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 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 part of the basis of their judgments and motivation.

Smith also makes an important assumption about motivation; notably, that people desire approbation. According to Smith,

Man naturally desires, not only to be loved, but to be lovely; or to be that thing which is the natural and proper object of love. He naturally dreads, not only to be hated, but to be hateful; or to be that thing which is the natural and proper object of hatred. He desires, not only praise, but praise worthiness; or to be that thing which, though it should be praised by nobody, is, however, the natural and proper object of praise. He dreads, not only blame, but blame-worthiness; or to be that thing which, though it should be blamed by nobody, is, however, the natural and proper object of blame" (*TMS* III.2.1:113-14).

The drive for approbation generates the incentives for an individual to internalize moral judgments. An individual who acts in a way that questions his acceptance of a community's moral values fails to receive approbation. In Smith's words:

we cannot live long in the world without perceiving that the respect of our equals, our credit and rank in the society we live in, depend very much upon the degree in which we possess, or are supposed to possess, those advantages. The desire of becoming the proper objects of this respect, of deserving and obtaining this credit and rank among our equals,

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<sup>20</sup> 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.

is, perhaps, the strongest of all our desires, and our anxiety to obtain the advantages of fortune is accordingly much more excited and irritated by this desire, than by that of supplying all the necessities and conveniencies of the body, which are always very easily supplied (*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).

Likewise, Smith provides an explanation for why people are deterred from *disobeying* certain norms. Punishment for violation of morals is not confined to social disapprobation but is made all the more painful by inner torment:

Those vicegerents of God within us, never fail to punish the violation of them, by the torments of inward shame, and self-condemnation; and on the contrary, always reward obedience with tranquility of mind, with contentment, and self-satisfaction (*TMS* III.5.6:166).

In contrast, strong believers in these precepts who steadfastly act in accordance with them receive both inner rewards and approbation from others.

The difficulty 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, however, 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 next develops a crucial element of his theory of moral behavior: the *impartial spectator*.<sup>21</sup> 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. If an individual:

would act so as that the impartial spectator may enter into the principles of his conduct, which is what of all things he has the greatest desire to do, he must, upon this, as upon all other occasions, humble the arrogance of his self-love, and bring it down to something which other men can go along with (*TMS* II.ii.2.1,82-83).

Further,

But though man has, in this manner, been rendered the immediate judge of mankind, he has been rendered so only in the first instance; and an appeal lies from his sentence to a much higher tribunal, to the tribunal of their own consciences, to that of the supposed impartial and well-informed spectator, to that of the man within the breast, the great judge and arbiter of their conduct. The jurisdictions of those two tribunals are founded upon principles which, though in some respects resembling and akin, are, however, in reality different and distinct. The jurisdiction of the man without, is founded altogether in

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<sup>21</sup> Smith's impartial spectator has been the subject of significant study; see, e.g., Brodie (2006), Fleischacker (2006, ch 4), Griswold (1999, chs 2-3), Otteson (2002, ch 1), and Raphael (2007).

the desire of actual praise, and in the aversion to actual blame. The jurisdiction of the man within, is founded altogether in the desire of praise–worthiness, and in the aversion to blame–worthiness (*TMS* III.2.32,130-31).

The device of the impartial spectator helps self-interested individuals interact and cooperate. Unbridled short-term self-interest would interfere with – and even sabotage – an individual obtaining her goals.

To this end, people develop general rules about behavior that brings approbation and disapprobation and strive to follow the first and avoid the latter (*TMS* III.4.5-10,159).

It is thus that the general rules of morality are formed. They are ultimately founded upon experience of what, in particular instances, our moral faculties, our natural sense of merit and propriety, approve, or disapprove of. We do not originally approve or condemn particular actions; because, upon examination, they appear to be agreeable or inconsistent with a certain general rule. The general rule, on the contrary, is formed, by finding from experience, that all actions of a certain kind, or circumstanced in a certain manner, are approved or disapproved of (*TMS* III.4.5-10,159).

Smith's argument describes the emergence of an equilibrium of “general rules of morality.” His arguments explain why, once a community has established “general rules of morality,” these rules are an equilibrium. In Smith's words,

When these general rules, indeed, have been formed, when they are universally acknowledged and established, by the concurring sentiments of mankind, we frequently appeal to them as to the standards of judgment, in debating concerning the degree of praise or blame that is due to certain actions of a complicated and dubious nature (*TMS* III.4.11,160).

The equilibrium logic of Smith’s “general rules of morality” can be summarized as follows. Given a set of general rules that all others in the community follow, each individual has an incentive to conform to them, to judge their own actions by them, to judge others by them, and to dispense approbation or disapprobation accordingly. The incentives for this individual to conform to the general rules reflect the positive rewards of approbation and two sorts of negative reactions: the condemnation and disapprobation of others and, worse, punishment from within;

that is, “those vicegerents of God within us, [who] never fail to punish the violation of them, by the torments of inward shame, and self-condemnation.” This dual threat leads individuals to discover and internalize – and, indeed, even help inform – the general rules of morality.

The central idea in Smith's positive approach to moral behavior is that morality is sustained because no one in this system has an incentive to deviate from the community's moral prescriptions. Smith's argument falls, therefore, in the NPPT category. He has built a positive, equilibrium model to explain how a community of individuals sustains morality, a set of normative judgments about behavior. As Smith writes:

Let it be considered too, that the present inquiry is not concerning a matter of right, if I may say so, but concerning a matter of fact. We are not at present examining upon what principles a perfect being would approve of the punishment of bad actions; but upon what principles so weak and imperfect a creature as man actually and in fact approves of it.  
[TMS III.5.6:77ea]

This aspect of Smith's system is not a normative argument that analyzes what ought to constitute moral behavior (see also Campbell 1971:48-51 and Rafael 2007:48), but a positive one about how normative behavior is sustained.<sup>22</sup>

**5.2. 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.

(1) Otteson's (2002:183-89) “familiarity principle” nicely describes a comparative static result about benevolence (Fleischacker 2004:66-68 makes the same argument). Smith argued in *TMS* that individuals are motivated by self-interest tempered with benevolence (*TMS* VI.ii.1.17-18:224-25, VI.ii.3.1-6:235-37; and VI.ii.1.1-10: 219-22). But benevolence is not universal, unqualified, or random. Benevolence arises from affection and habituated sympathy, sympathy

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<sup>22</sup> Our thesis that Smith builds a positive approach to morals does not deny the possibility he also provided a normative approach to morals, a topic of extensive and lively discussion (see, e.g., Cropsey 1957, Evensky 2005, Fleischacker 2004, Griswold 1999 and Weinstein 2013),

that arises through repeated interaction and closeness and which is stronger in some relationships than in others. This habituated sympathy depends on familiarity. For many, perhaps most, people, it is strongest for their immediate family.<sup>23</sup> 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, the 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.

(2) Smith argues that a person is more likely to be admired and hence receive approbation for, say, honesty if she becomes an honest person than if she merely simulates an honest person. According to Smith, people cannot be satisfied solely with being praised or admired; they must also believe themselves to be praiseworthy or admirable. “But, in order to attain this satisfaction, we must become the impartial spectators of our own character and conduct. We must endeavour to view them with the eyes of other people, or as other people are likely to view them. When seen in this light, if they appear to us as we wish, we are happy and contented” (*TMS* III.2.3:114). Further, “the love of praise-worthiness is by no means derived altogether from the love of praise,” but the opposite: “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.2.2-3:114).

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<sup>23</sup> In Smith's words, the immediate family 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.ii.1.1:219).

Smith's approach therefore differs from Mandeville in his famous *Fable of the Bees: or, Private Vices, Public Benefits* (1714). Mandeville argued that certain environments induce self-interested individuals to simulate various normative traits, such as honesty and benevolence. In the Mandevillian world, people act so as to receive praise. Smith suggests that this is true to a degree, but he further argued that people do not gain satisfaction from *merely* being admired or praised. Instead satisfaction requires that a person must believe themselves to be admirable or praiseworthy. We cannot "be satisfied with being merely admired for what other people are admired," Smith writes in *TMS*. "We must at least believe ourselves to be admirable for what they are admirable" (*TMS* III.2.3:114).

Smith's argument therefore takes the form of a comparative static. We gain a certain amount of satisfaction from being praised. But, Smith argues, we derive more satisfaction if we deem ourselves worthy of that praise. We may approve of our own behavior as impartial spectators of ourselves, but seeing others' approval of our actions corroborates and enhances this self-approbation. Smith describes this in the following way:

If, as impartial spectators of our own behavior, our actions appear to us as we wish, we are happy and contented. But it greatly confirms this happiness and contentment when we find that other people, viewing them [i.e., our actions] with those very eyes with which we, in imagination only, were endeavouring to view them, see them precisely in the same light in which we ourselves had seen them. Their approbation necessarily confirms our own self-approbation" (*TMS* III.2.3;114).

Smith's argument implies a further comparative static based on incentives. If the personal rewards to being an honest person are higher than those from merely simulating honesty, honest people will behave more honestly than people who merely simulate honesty.

(3) As another instance, return to Smith's idea that most people have incentives to conform to the community's standards most of the time.<sup>24</sup> But most people probably do not conform all the time. For example, people may differ in the degree of "self-command" required to behave morally. Smith contrasts the man of weak resolution or self-command with a man of true, full self-command. People with less self-command have a lower ability to internalize admirable qualities and to follow moral precepts. They therefore receive less approbation. The same comparative static logic applies to self-appraisal: "The degree of the self-appraisal 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-appraisal" (*TMS* III.3.25-26,146-47).

(4) A final illustration of comparative statics logic in *TMS* involves the form of rewards and punishments for people of religious belief. People with these beliefs suffer punishment for injustice in this life, but also in that to come:

When the general rules which determine the merit and demerit of actions, come thus to be regarded as the laws of an All-powerful Being, who watches over our conduct, and who, in a life to come, will reward the observance, and punish the breach of them; they necessarily acquire a new sacredness from this consideration... The very thought of disobedience appears to involve in it the most shocking impropriety (*TMS* III.5.12,170; see also *TMS* II.ii.3.12:91)."

The comparative static argument in this passage is clear. Section 4.1 described the dual nature of punishment for failing to abide by general rules of morality; namely, disapproval and punishment from others combines with disapproval and punishment from within. The implied level of conformity is an equilibrium. If we now add religious beliefs to an individual's self-disapproval and punishment, her motives to behave morally are even stronger. All else

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<sup>24</sup> The discussion of this third comparative static idea draws on Otteson's (2002:305-14) discussion of "moral deviancy."

constant, a person of religious beliefs will choose morally on more occasions.<sup>25</sup> Put differently, Smith's approach explains why self-interested people have reason both to conform to their community's moral standards and to internalize them; that is to become autonomous moral beings. His comparative static arguments tend to emphasize the circumstances that make the equilibrium behavior stronger or weaker in the sense that more (or fewer) people follow the equilibrium.

We sum up as follows this discussion of Smith's views on morality in *TMS*. Smith proposes general rules about how morality is sustained in a community. Given a community's set of morals, each individual in the community faces various incentives to adhere to these morals. Smith argues that beyond merely acting morally people will internalize the community's moral standards. The incentives to do so arises from the approbation of others, from the nature of happiness and self-approbation, and from the psychological pain and inner-torment that arises from failing to behavior morally. These rules are general because they hold for all communities. Different communities may have very different moral standards; but the logic of why individuals behave morally is the same across communities. In this part of his work, Smith is less interested in what constitutes moral behavior than he is in how self-centered people sustain moral behavior.

## **6. Smith's "Considerations Concerning the First Formations of Languages"**

In his complex essay on language, Smith studies the origins of language, advances a model of the language stability, and presents hypotheses about the evolution of language using the logic of

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<sup>25</sup> 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).

equilibrium and comparative statics.<sup>26</sup> To understand language, Smith describes what we now call a coordination game. People face a problem: what sounds should correspond to what objects, actions, modifiers, and ideas? To be understood, people in a community must coordinate on a solution to this problem. In Smith's words, as people meet, they would “endeavour to make their mutual wants intelligible to each other, by uttering certain sounds, whenever they meant to denote certain objects” (“*Languages*” 1:203). Language solves the coordination problem by assigning a shared sense of meaning in the form of a connection between sounds and meaning.<sup>27</sup>

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 so many different languages exist that solve this same problem, no natural solution to the coordination problem exists.

How is any particular language an equilibrium? Suppose that a community uses a given language. Smith shows that members of a community face both positive and negative incentives to adhere to this 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

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<sup>26</sup> Important studies of Smith's “*Languages*” include Dascal (2006), Land (1977), Noordesgraaf (1961), Otteson (2002, 2011), and Plank (1992). In what follows, we draw on Otteson's (2011:21-25) interpretation of Smith's essay. Laitin (1994) provides a modern perspective on language as a coordination problem.

<sup>27</sup> Smith has a simple narrative of how a set of people arrive at a language equilibrium, but it is 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.

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 by others.<sup>28</sup>

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 communicate, to make ourselves understood, then significant deviations make the deviator worse off because she cannot be understood.<sup>29</sup>

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

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<sup>28</sup> 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.”

<sup>29</sup> 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. Moreover, as Laitin (1994) observes, a surprisingly large number of situations exist where people must choose their languages. A Dutch person living in New York City must speak English. But many living in the large immigrant Mexican communities of the American West can survive without learning English.

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 this type of original language, “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 this reason Smith argues that when two nations intermix, due to conquest or commercial interactions, language evolves into a simpler form with fewer declensions that is easier for members of both nations to master.

Smith's arguments about the evolution of language correspond to a comparative statics analysis. In the beginning there exists an equilibrium in which each of two separate nations maintains its original language. The nations then intermix, the old languages cannot be sustained, and a new type of language emerges.

The point of this account of languages is that, here too, Smith uses the same set of assumptions about human motivation and the same equilibrium and comparative statics approach to understand another important aspect of human behavior. Smith's theory produces general rules about languages; notably, their stability and evolution.

## 7. Smith's Proposal for a Federal Union To End the War with America

Smith discusses the contest with America in a 1778 memorandum, "Thoughts on the State of the Contest with America" and in several places in the *Wealth of Nations*. The purpose of the memo was to suggest a way to resolve the on-going conflict. Written to an official in the Exchequer, Smith's essay is very brief, and his analysis, abbreviated. To make the logic clearer, we will posit some reasonable assumptions about the historical context within which Smith's proposal arose. First, we posit that over the 60 or 80 years prior to the end of the Seven Years War (1756-63), the British Empire was a stable, long-term equilibrium (see R. Smith 2002:\*\*). Practice over governance of the empire evolved during this period; and, although not without some disputes and controversy, both sides of the Atlantic accepted this institutional structure. Second, the Seven Years War altered this stable equilibrium. After the Seven Year's War the British attempted to introduce changes in the institutional structure; specifically, the way the American colonies were taxed and governed. The Americans saw these changes as a violation of the Constitution. Violence conflict ensued.

Smith addressed his memo to the conflict. After listing four possible outcomes, he argued that a fiscal union could resolve the conflict to both sides' advantage. The British should grant Americans Parliamentary representation based on the proportion of taxes they paid; and the Americans should provide revenue sought by the British as a contribution to the defense of the Empire, defense of the American colonies in particular. Although Smith suggested that this arrangement "seems not very probable at present," it would resolve the conflict by significantly altering the incentives faced by both parties to the contest, aligning their interests toward cooperation rather than fighting ("*Thoughts*" 381; see also Stevens 1977:379). Smith believed that the Union would make the British better off: "By a federal union with America we should

certainly incur much less expense, and might, at the same time, gain as real advantages, as any we have hitherto derived from all the nominal dominion we have ever exercised over them”

(383). Skinner (1996a:213) observes that Smith's proposal for Union was “in effect an Atlantic Economic Community.”<sup>30</sup>

Smith's main point is a conjecture which we can state in the form of a comparative static result. The status quo in 1778 was armed conflict. In this setting, implement Smith's proposal for the governance of the empire and stability reemerges. As Smith outlines in his memo, if the Americans:

were once assured that we meant to claim no dominion over them; and if in the peace which we made with them, we insisted upon nothing, but the personal safety, and the restoration to their estates and possessions, of those few unfortunate individuals who have made some feeble, but ineffectual efforts to support our authority among them. By a federal union with America we should certainly incur much less expense, and might, at the same time, gain as real advantages, as any we have hitherto derived from all the nominal dominion we have ever exercised over them (“*Thoughts*,” 383).

The Americans would also gain; namely, an end to the violent conflict and a resolution of the constitutional conflict in a manner that preserved American freedom and self-governance, and the taxation question resolved.

In an amusing note on Smith's proposal, Nobel laureate, Ronald Coase (1977:323-25), suggested that if Smith's proposal had been successfully implemented, “there would have been no 1776, ... America would now be ruling England, and we [in America] would be today celebrating Adam Smith not simply as the author of the *Wealth of Nations*, but hailing him as a founding father.”

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<sup>30</sup> Stevens (1977, 379-80) suggests that Smith was not alone in proposing this idea: “Franklin had written in 1754 that union would be ‘very acceptable to the colonies’ with certain reservations. As late as 1775 he had a lingering sympathy for the idea, but came round thereafter to the view that nothing would serve but complete emancipation. Lord Kames had suggested a ‘consolidating union’ in 1774, in *Sketches of the History of Man* (II.iv). Governor Pownall recommended a federal union in successive editions of *Administration of the Colonies* (1764, 1765, 1766, 1768, 1774, 1777).”

## 8. Conclusions

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 behavioral outcomes are stable; comparative statics arguments explore the conditions under which these outcomes change. The logic of equilibrium and comparative statics afforded a method that allowed Smith to go beyond narrative and the reporting patterns of behavior. The method allowed Smith 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.

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 rule of law, and the emergence of nascent market societies. Such content is consistent with the existing literature.<sup>31</sup> 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,

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<sup>31</sup> 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.iii.12:405).

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 (Phillipson 2010: 2). In short, the equilibrium and comparative statics methods we have explored in this paper exemplify this uniquely Smithian method; they allow Smith to not just identify patterns and associations in these processes, but also to explain why they 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.<sup>32</sup> 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 domains of human behavior, with a major book associated with each realm:

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<sup>32</sup> Many scholars in the literature discuss Smith's integrated project, including Fitzgibbons (1995), Griswold (1999), and Fleischacker (2006).

- The social realm – *The Theory of Moral Sentiments*.
- The political and legal realm – the missing book on *Jurisprudence*.
- The economic realm – the *Wealth of Nations*.

As with his predecessor Hume, Smith challenged the unidirectional idea that government influences the forms of market activity. In Smith's world, politics is not merely epiphenomenal to economic life (Milgate and Stimson 2009: 69). Smith uses the same approach to understanding economics, politics and law, and social life as separate realms of behavior, but as interacting in a complementary manner. Our account of Smith's arguments from Book III of the *Wealth of Nations* illustrates the complementarity of economics, politics, and law, as does his discussion of the famous four stages theory of history. Furthermore, his essay on the formation of languages, the history of astronomy, and the whole of *TMS* exhibit the same approach to deriving general principles in other realms of human behavior. 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.

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.

## References

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

The text uses the following abbreviations.

*Languages*: Smith, Adam. 1751 [1983]. "Considerations Concerning the First Formations of Languages" in J. G. Bryce, ed., *Lectures on Rhetoric and Belles Lettres*. Indianapolis: Liberty Fund.

*LJ(A)*: Smith, Adam. 1762-63; [1981]. *Lectures on Jurisprudence*: Report of 1762–3. R. L. Meek., D.D. Raphael, and P.G. Stein, eds. vol. V of the Glasgow Edition of the Works and Correspondence of Adam Smith. Indianapolis: LibertyFund.

- LJ(B)*: Smith, Adam. (1766)[1981] *Lectures on Jurisprudence*: Report dated 1766 in: Smith, Adam. 1762-63; 1763-64(1767)[1981]. *Lectures on Jurisprudence*. R. L. Meek., D.D. Raphael, and P.G. Stein, eds., vol. V of the Glasgow Edition of the Works and Correspondence of Adam Smith. Indianapolis: LibertyFund.
- LRBL*: Smith, Adam. 1762-63[1983]. *Lectures on Rhetoric and Belles Lettres*. Report data 1762-63 J.C. Bryce, ed., vol IV of the Glasgow Edition of the Works and Correspondence of Adam Smith. Indianapolis: LibertyFund.
- Thoughts*: “Smith’s Thoughts on the State of the Contest with America,” February 1778,” APPENDIX B. *Correspondence of Adam Smith* ed. E. C. Mossner and I. S. Ross, vol. VI of the Glasgow Edition of the Works and Correspondence of Adam Smith. Indianapolis: Liberty Fund, 1987.
- TMS*: Smith, Adam. 1759 [1982]. *The Theory of Moral Sentiments*. D.D. Raphael and A.L. Macfie, eds. vol. I of the Glasgow Edition of the Works and Correspondence of Adam Smith. Indianapolis: Liberty Fund.
- WN*: Smith, Adam. 1776 [1981]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. 2 vols. R.H. Campbell, A.S. Skinner, and W.B. Todd, eds. vol II of the Glasgow Edition of the Works and Correspondence of Adam Smith. Indianapolis: Liberty Fund.
- Acemoglu, Daron, and James A. Robinson. 2006. Economic Backwardness in Political Perspective,” *American Political Science Review*. 100: 115-131
- Acemoglu, Daron, and James A. Robinson. 2012. *Why Nations Fail*.
- Azariadis, Costas, and John Stachurski. 2005. “Poverty Traps.” *Handbook of Economic Growth*, Volume 1A. Edited by Philippe Aghion and Steven N. Durlauf.
- Bazerman, Charles. 1994. “Money Talks: Adam Smith’s Rhetorical Project,” in *idem.*, *Constructing Experience*. Carbondale: University of Southern Illinois Press.
- Berry, Christopher. 2006. “Smith and Science” in Haakonssen, ed., *Cambridge Companion to Adam Smith*. Cambridge: Cambridge University Press.
- Besley, Timothy and Torsten Persson. 2011. *Pillars of Prosperity*. Princeton: Princeton University Press.
- Blaug, Mark. (1992) *The Methodology of Economics: Or How Economists Explain*. 2 ed. Cambridge: Cambridge University Press.
- Broadie, Alexander. (2006) “Sympathy and the Impartial Spectator,” in Knud Haakonssen, ed., *The Cambridge Companion to Adam Smith*. Cambridge: Cambridge University Press.
- Brue, Stanley L., and Randy R. Grant. 2007. *The Evolution of Economic Thought*. 7<sup>th</sup> ed. Thomson South-Western.
- Buchanan, James M., and Yong J. Yoon. 1994. *The Return to Increasing Returns*. Ann Arbor: Michigan University Press.

- Bueno de Mesquita, et al. 2003. *The Logic of Political Survival*. Cambridge, MA: M.I.T. Press.
- Clark, Greg. 2007. *Farewell to Alms*. Princeton: Princeton University Press.
- Coase, Ronald. 1977. "The Wealth of Nations," *Economic Inquiry* 15(3): 309–325.
- Collier, Paul. 2007. *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*. Oxford: Oxford University Press.
- Cox, Gary W. 2012. "Was the Glorious Revolution a Constitutional Watershed?" *The Journal of Economic History*, 72(3): 567-600.
- CNW: Cox, Gary W., Douglass C. North, and Barry R. Weingast. 2013. "The Violence Trap: A Political-Economic Approach To the Problems of Development," Working Paper, Hoover Institution, Stanford University.
- Cropsey, Joseph. 1957. *Polity and Economy, an Interpretation of the Principles of Adam Smith*. M. Nijhoff. 2001 *Polity and the Economy: With Further Thoughts on the Principles of Adam Smith*. rev. ed., South Bend, Ind: St. Augustine's Press.
- Dickey, Laurence. 1986. "Historicizing the 'Adam Smith Problem': Conceptual, Historiographical, and Textual Issues." *The Journal of Modern History*. 58 (3): 579-609.
- Easterly, William. 2001. *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, Mass: MIT Press.
- Ekelund, Robert B., Jr., and Robert D. Tollison. 1997. *Politicized Economies: Monarchy, Monopoly, and Mercantilism*. College Station: Texas A&M Press.
- Ekelund, Robert B., Jr., and Robert F. Hébert. (2007) *A History of Economic Theory and Method*. 5<sup>th</sup> ed. Long Grove, Ill: Waveland Press, Inc.
- Endres, A.M. 1991. "Adam Smith's Rhetoric of Economics: An Illustration Using 'Smithian' Compositional Rules," *Scottish Journal of Political Economy*. 38(1): 76-95.
- Evensky, Jerry. 2005 *Adam Smith's Moral Philosophy: A Historical and Contemporary Perspective on Markets, Law, Ethics, and Culture*. Cambridge: Cambridge University Press.
- Fernandez, Raquel, and Dani Rodrik. 1991. "Resistance to Reform: Status Quo Bias in the Presence of individual-Specific Uncertainty," *American Economic Review* 91: 1146-55.
- Fitzgibbons, Athol. 1995. *Adam Smith's System of Liberty, Wealth, and Virtue: The Moral and Political Foundations of the Wealth of Nations*. Oxford: Clarendon Press.
- Fleischacker, Samuel. 2002. "Adam Smith's Reception among the American Founders, 1776-1790) *The William and Mary Quarterly*. Third Series, Vol. 59, no. 4 (Oct. 2002) pp. 897-924.
- Fleischacker, Samuel. 2004. *Adam Smith's Wealth of Nations: A Philosophical Companion*. Princeton: Princeton University Press.

- Gorski, Philip. 2003. *The Disciplinary Revolution: Calvinism and the Rise of the State in Early Modern Europe*. Chicago: University of Chicago Press.
- Griswold, Charles L., Jr. 1999. *Adam Smith and the Virtues of the Enlightenment*. Cambridge: Cambridge University Press.
- Griswold, Charles. 2006. "On the Incompleteness of Adam Smith's System," in Vivienne Brown, ed., *The Adam Smith Review vol 2*. London: Routledge.
- Grossman, Gene M., and Elhanan Helpman. 2001. *Special Interest Politics*. Cambridge: M.I.T. Press.
- Haakonssen, Knud. 1981. *The Science of a Legislator: The Natural Jurisprudence of David Hume and Adam Smith*. Cambridge: Cambridge University Press.
- Henderson, Willie. 2006. *Evaluating Adam Smith: Creating the Wealth of Nations*. London: Routledge.
- Hirschleifer, Jack. 1994. "The Dark Side of the Force," *Economic Inquiry*, 32: 1-10. Reprinted in idem., 2001. *The Dark Side of the Force*. Cambridge: Cambridge University Press.
- Hollander, Samuel. 1973. *The Economics of Adam Smith*. University of Toronto Press.
- Hont, Istvan. (1989[2005]) "Adam Smith and the Political Economy of the 'Unnatural and Retrograde' Order." Reprinted in, idem., *The Jealousy of Trade* (2005). Cambridge: Harvard University Press.
- Hont, Istvan. 2015. *Politics in Commercial Society: Jean Jacques Rousseau and Adam Smith*. Béla Kapossy and Michael Sonenscher, eds. Cambridge: Harvard University Press.
- Kalyvas, Adreas, and Ira Katznelson. 2008. *Liberal Beginnings: Making a Republic for the Moderns*. Cambridge: Cambridge University Press.
- Kennedy, Gavin. 2005. *Adam Smith's Lost Legacy*. Houndmills, UK: Palgrave Macmillan.
- Kennedy, Gavin. 2010. *Adam Smith*. 2<sup>nd</sup> ed. Houndmills, UK: Palgrave Macmillan.
- Laitin, David. (1994) "The Tower of Babel as a Coordination Game: Political Linguistics in Ghana," *American Political Science Review* 88: 622-34.
- Macfarlane, Alan. 2000. *The Riddle of the Modern World: Of Liberty, Wealth, and Equality*. Houndsmills, UK: Palgrave.
- McCloskey, Deirdre N. 1998. *The Rhetoric of Economics*. 2<sup>nd</sup> ed. Madison: University of Wisconsin Press.
- McKenna, Stephen J. 2006. *Adam Smith: The Rhetoric of Propriety*. Albany, New York: State University of New York Press.
- Milgate, Murray. 1987. "Equilibrium: Development of the Concept," in J. Eatwell, M. Milgate and P. Newman, eds., *The New Palgrave: A Dictionary of Economics*. London: Macmillan.
- Murray Milgate and Shannon Stimson, *After Adam Smith: A Century of Transformation in Politics and Political Economy*. Princeton, NJ: Princeton University Press, 2009.

- Montes, Leonidas. 2003. "Das Adam Smith Problem: Its origins, the stages of the current debate, and one implication for our understanding of sympathy." *Journal of the History of Economic Thought*. 25 (1): 63-90.
- Montes, Leonidas. 2006. "Newtonianism and Adam Smith" *Oxford Handbook of Adam Smith*. Oxford: Oxford University Press.
- Moss, Laurence. 1979. "Power and Value Relationships in the Wealth of Nations" in Gerald P. O'Driscoll, Jr., ed., *Adam Smith and Modern Political Economy: Bicentennial Essays on the Wealth of Nations*. Ames, Iowa: Iowa State University Press.
- Myint, Hla. 1948[1965]. *Theories of Welfare Economics*. New York: August M. Kelly.
- North, Douglass C. 1981. *Structure and Change in Economic History*. New York: W.W. Norton.
- NWW: North, Douglass C., John Joseph Wallis, and Barry R. Weingast. 2009. *Violence and Social Orders: A Conceptual Framework for Understanding Recorded Human History*. Cambridge: Cambridge University Press.
- Otteson, James. 2002. *Adam Smith's Marketplace of Life*. Cambridge: Cambridge University Press.
- Otteson, James. 2011. *Adam Smith*. New York: Continuum International Publishing Group.
- Pack, Spencer J. 1991. *Capitalism as a Moral System*. Cheltenham, UK: Edward Elgar.
- Persson, Torsten, and Guido Tabellini. 2005. *The Economic Effects of Constitutions*.
- Raphael, D.D. 1985. *Adam Smith*. Oxford: Oxford University Press.
- Raphael, D.D. 2007. *The Impartial Spectator: Adam Smith's Moral Philosophy*. Oxford University Press.
- Richardson, Gary. 2005. "Craft Guilds and Christianity in Late-medieval England a Rational-choice Analysis," *Rationality and Society*. 17(2): 139–189.
- Robbins, Lionel. 1998. *A History of Economic Thought: The LSE Lectures*. Steven G. Medema and Warren J. Samuels, eds. Princeton: Princeton University Press.
- Rodrik, Dani. 1999. "Where Did All the Growth Go? External Shocks, Social Conflict and Growth Collapses," *Journal of Economic Growth*, (December).
- Ross, Ian Simpson. 2004. "'Great Works upon the Anvil' in 1785: Adam Smith's Projected Corpus of Philosophy," in Vivienne Brown, ed., *The Adam Smith Review vol 1*. London: Routledge.
- Ross, Ian Simpson. 2006. "Reply to Charles Griswold, 'On the Incompleteness of Adam Smith's System,'" in Vivienne Brown, ed., *The Adam Smith Review vol 2*. London: Routledge.
- Rothschild, Emma. 2001. *Economic Sentiments: Adam Smith, Condorcet, and the Enlightenment*. Cambridge: Harvard University Press.

- Rothschild, Emma, and Amartya Sen. 2006. "Adam Smith's Economics," in Knud Haaksonssen, ed., *The Cambridge Companion to Adam Smith*. Cambridge: Cambridge University Press
- Schultz, Kenneth A., and Barry R. Weingast. 2003. "The Democratic Advantage: The Institutional Sources of State Power in International Competition," *International Organization* (Winter): 57: 3-42.
- Schumpeter, Joseph A. 1954. *History of Economic Analysis*. New York: Oxford University Press.
- Shleifer, Andrei, and Robert W. Vishny. 1998. *The Grabbing Hand: Government Pathologies and Their Cures*. Cambridge: Harvard University Press.
- Skinner, A.S. 1996a. "Mercantilist Policy: The American Colonies" in A.S. Skinner, *A System of Social Science: Papers Relating to Adam Smith*. Oxford: Clarendon Press.
- Skinner, Andrew Stewart. 1996b. "Early Writings: Science and the Role of the Imagination," in A.S. Skinner, *A System of Social Science: Papers Relating to Adam Smith*. 2nd ed. Oxford: Clarendon Press
- Spiller, Pablo T., and Mariano Tommasi. 2007. *The Institutional Foundations of Public Policy in Argentina*. Cambridge: Cambridge University Press.
- Stasavage, David. 2002. "Credible Commitment in Early Modern Europe: North and Weingast Revisited" *Journal of Law, Economics, and Organizations*. 18(1): 155-186.
- Stevens, David. 1977. "Introduction" to Adam Smith's *Thoughts*.
- Sussman, Nathan and Yishay Yafeh. 2007. "Institutional Reforms, Financial Development and Sovereign Debt: Britain 1690-1790." *Journal of Economic History* 66: 1-30.
- Teichgraeber, Richard F., III. 1981. "Rethinking Das Adam Smith Problem." *Journal of British Studies*. 20 (2): 106-123.
- Teichgraeber, Richard F. 1986 *'Free Trade' and Moral Philosophy: Rethinking the Sources of Adam Smith's Wealth of Nations*. Durham: Duke University Press.
- Tieben, Bert. (2012) *The Concept of Equilibrium in Different Economic Traditions: An Historical Investigation*. Cheltenham, UK: Edward Elgar.
- Weingast, Barry R. 2015a. "From 'The Lowest State of Poverty and Barbarism' to the Opulent Commercial Society: Adam Smith's Theory of Violence and the Political Economics of Development," Conference on the "Economics of the Civil society," NBER, Cambridge, MA, October 24-25.
- Weingast, Barry R. 2015b. "Adam Smith's Theory of Religion, Theology, and Religious Organization," Notes; Stanford University.
- Weinstein, Jack Russell. 2013. *Adam Smith's Pluralism: Rationality, Education, and the Moral Sentiments*. New Haven: Yale University Press.

Winch, Donald. 1978. *Adam Smith's Politics: An Essay in Historiographic Revision*. Cambridge: Cambridge University Press.

Young, Allyn A. 1928. "Increasing Returns and Economic Progress," *The Economic Journal*, Vol. 38, No. 152: 527-542.