

CHAPTER 4

The Nature and Causes of Corporate Negligence, Sham Lectures, and Ecclesiastical Indolence: Adam Smith on Joint-Stock Companies, Teachers, and Preachers

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In every profession, the exertion of the greater part of those who exercise it, is always in proportion to the necessity they are under of making that exertion. Adam Smith, WN

Adam Smith discussed joint-stock companies and educational and ecclesiastical institutions—in that order—in part 3, chapter 1, book 5 of The Nature and Causes of the Wealth of Nations ([1776] 1937; hereafter cited as WN). It is unlikely that Smith's bunching and sequencing of these discussions was coincidental, as he typically developed his arguments carefully and strategically (Smith 1983, 89, 146–47).

I shall argue that Smith saw all three institutions adversely affected by similar incentive structures that were likely to produce poorly functioning organizations. Smith identified self-interest as the driving force of the incentive misalignments that he diagnosed, and he considered what, if anything, could prevent these institutions from being afflicted by them.

I shall furthermore argue that in order to explain the misalignment of incentives, Smith looked at the particular raison d'etre of these institutions: their products. In analyzing them, Smith made the now wellknown distinction between inspection, experience, and credence goods¹ and discussed how the nature of a product can affect the internal organization of an institution; this distinction also motivated him to discuss joint-stock companies, teaching, and preaching in the order he did. Specifically, he argued that joint-stock companies typically function only if they restrict themselves to routinized activities-inspection goods of sorts. Such solutions are not available for teaching and preaching, which Smith identified as experience goods and credence goods, respectively. As we now know, and as Smith understood rather well, serious moral hazard and quality assessment problems afflict such goods and their production-preaching (the ultimate credence good) more so than teaching (a classic experience good). Throughout, Smith's long-standing interest in institutional arrangements—whether they be reputational or regulatory—informed his discussion on the prevention of incentive misalignment and the occurrence of negative organizational outcomes.

The balance of this chapters organized as follows: In Sect. 1, I sketch why promotion of manufacture, teaching, and preaching are problem isomorphs, and follow with a detailed discussion of Smith's analysis of joint-stock companies and educational and ecclesiastical institutions in Sects. 2 through 4. Next, I consider the commonalities of these three

¹ The distinction reflects the degree to which the quality of a good can be assessed before purchase, after purchase, or both. If a consumer must consume the product to determine its quality, it is said to have experience quality (Nelson 1970). Michael Darby and Edi Karni (1973) labeled those experience goods whose quality cannot be determined after consumption credence goods. Examples of experience goods are car repairs and health, day, or elder care; examples of credence goods are organic fruit or certain kinds of medical care and other prevention and repair services. In contrast, goods whose quality can be assessed prior to purchase are called inspection or search goods (Carlton and Perloff 1994; Tirole 1988). Note that labor (services) can be similarly classified. The effort that goes into routinized activities can be easily gauged. In contrast, effort is often difficult to observe or verify for non-routinized activities. Smith did not use the labels employed by the modern Industrial Organization literature, but he understood well that whether the quality of a good or service can be assessed before or after purchase feeds on the internal organization of an institution and its products.

discussions. I also argue that Smith's discussion of the pervasive incentive problems of joint-stock companies and educational and ecclesiastical institutions is an important example of a reasoning routine that Smith employed in a variety of contexts.

1 Promotion of Manufacture, Teaching, and Preaching as Problem Isomorphs: A Road Map

Adjustable quality is typical of experience and credence goods. One must experience such products or services (Nelson 1970; Tirole 1988) or may even have to accept their quality on faith if an assessment is prohibitively expensive or not possible at all (Darby and Karni 1973; Tirole 1988). The possibility that the seller of a good promises high quality (at a corresponding price) and then delivers low quality creates a moral hazard problem for the seller (Klein and Leffler 1981). Typically, the effort put into production determines the quality of a good or service. The possibility that an agent promises high effort (at a corresponding wage or salary) and then delivers low effort creates a moral hazard problem for the agent. Smith's arguments suggest that quality assessment problems and moral hazard problems are closely related.² The notions of adjustable quality and adjustable effort, and the resultant moral hazard, or principal-agent problems, are key concepts in the following discussion.

Smith's concern with the circumstances that spur industry or induce indolence led to his discussion of joint-stock companies and educational and ecclesiastical institutions. (The epigraph to this chapter summarizes Smith's view succinctly.) In discussing these institutions, Smith followed a basic pattern: He first pondered the raison d'être of the institution under consideration and its products. He then analyzed whether that institution ought to defray its own expense. Finally, he considered different payment modes and their consequences for the provision of goods such as teaching and preaching. In the next three sections, I shall use Smith's rhetorical pattern as template.

² One can indeed show that the underlying incentive problems in each are identical in strategic game form (Ortmann and Colander 1997). To describe such situations, Herbert Simon (1991) has coined the notion of "problem isomorphs". From here on I shall use the terms *quality* (of a good or service) and *effort* (of the production factor labor) interchangeably.

2 SMITH ON JOINT-STOCK COMPANIES

2.1 Raison d'Etre

Smith's discussion of joint-stock companies appears in book 5, chapter 1, part 3, article 1, as part of a discussion "Of the Expense of Public Works and Institutions". It immediately follows his discussion of the provision and maintenance of such public infrastructure items as "good roads, bridges, navigable canals, harbors, etc." necessary for facilitating the commerce of society and increasing the wealth of the nation. Smith (WN, 690–91) acknowledged the protection of trade to be as essential to the defense of the commonwealth as the military. He considered joint-stock companies in particular to be "established for the public-spirited purpose of promoting some particular manufacture" (715).

2.2 Who is to Pay?

Smith left no doubt that "the greater part of such public works [as good roads, etc.] may easily be so managed, as to afford a particular revenue sufficient for defraying their own expense, without bringing any burden upon the general revenue of the society" (682). However, Smith also suggested there exist "Public Works and Institutions ... necessary for facilitating particular Branches of Commerce" which could not be managed this way, especially those institutions that helped to protect trade with "barbarous nations" (e.g., forts, garrisons, ambassadors, and regulated and joint-stock companies) (690). Their purpose and expense required that they be paid out of the general revenue or receive special property rights that would allow them to recapture their initial investment. Smith thus proposed two provision modes, one drawing on the general revenue and the other drawing on private funds.

Specifically, Smith suggested that some trade, due to its comparatively high risk, represented "an experiment which the state might not think prudent to make" (691). In such situations, governments relied on regulated and joint-stock companies to privatize the risk, typically in return for temporary monopoly rights (712).

2.3 Incentive Problems

Smith pointed out that while joint-stock companies had a "public-spirited purpose" and in the short run could be successful in promoting some

particular manufacture, "they have in the long-run proved, universally, either burdensome or useless, and have either mismanaged or confined the trade" (691). This occurred whether or not they had been given monopoly rights (700).

Smith explained that within joint-stock companies, such an outcome was the inevitable consequence of misaligned incentives generated by the organizational form. When compared to private "co-partneries" (partnerships), joint-stock companies had two severe disadvantages. First, joint stock was transferable and thus facilitated the separation of management and ownership—an issue that Smith explicitly discussed (699). Second, joint stock limited the financial risk for owners, further blunting their incentives to monitor their agents. The "total exemption from trouble and from risk, beyond a limited sum", invited people to become "adventurers in joint stock companies" and thus channeled funds away from the more incentive-compatible organization form—the private partnership (699).

The directors of such [joint-stock] companies, however, being the managers rather of other people's money than their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private co-partnery frequently watch over their own Negligence and profusion, therefore, must always prevail, more or less, in the management of such a company. (700)

Smith analyzed the fate of a number of joint-stock companies, sprinkling his discussion with important and thoroughly modern insights and conclusions. Smith noted, for example, that there was an inverse relationship between the number of proprietors in a company and the attention that they would pay to the business at hand (702-703). He concluded, "that a joint-stock company should be able to carry on successfully any branch of foreign trade, when private adventurers can come into any sort of open and fair competition with them, seems contrary to all experience" (705). Looking at the evidence, Smith furthermore concluded that joint-stock companies, even those with monopoly rights, were likely to fall prey to the destructive dynamics of incentive misalignment. Smith illustrated

³ He thus anticipated, by roughly two hundred years, group-size effects now well established in the literature (Isaac, Walker, and Williams 1995; Abrahamson and Park 1994; Yermack 1996).

this point in a lengthy discussion of the fate of the East India Company (705–12). He argued that this company became the victim of its initial success (monopoly profits): "The great increase of their fortune had, it seems, only served to furnish their servants with a pretext for a greater profusion, and a cover for greater malversation, than in proportion even to that increase of fortune" (709).

He thus anticipated, by roughly two hundred years, group-size effects now well established in the literature (Isaac, Walker, and Williams 1995; Abrahamson and Park 1994; Yermack 1996).

Smith then discussed failed attempts to modify the governance structure of the company, stressing that the incentive alignment problems were structural (710). Summarizing his discussion, and referring to evidence compiled by Abbe Andre Morellet, Smith concluded that incentive problems of joint-stock companies were ubiquitous. But he also identified a curious and intriguing exception: "The only trades which it seems possible for a joint stock company to carry on successfully, without an exclusive privilege, are those, of which all the operations are capable of being reduced to what is called a routine, or to such a uniformity of method as admits of little or no variation" (713).

In other words, a "routine" is a trade where quality or effort (or both) is not adjustable—the key characteristic of so-called inspection goods. Smith identified banking, insurance (from fire, sea risk, and capture in time of war), construction and maintenance of canals, and provision of water for cities as four trades where routinization was typical. While the characterization of banking and insurance as routine undertakings seems curious from today's perspective, it is relevant for my argument about the sequencing of Smith's discussion that in his assessment of the survivorship record of joint-stock companies, he identified the absence of adjustable quality and effort as the key distinguishing feature.

3 SMITH ON EDUCATIONAL INSTITUTIONS

3.1 Raison d'Etre

Smith discussed educational institutions in book 5, chapter 1, part 3, and article 2. This discussion immediately follows Smith's treatment of joint-stock companies. Smith contended that education was good not only for

individuals—for example, to counteract ignorance and stupidity, which he regarded as the somewhat inevitable consequence of the division of labor (734–35)—but also for society at large. Education, claimed Smith, made it possible for people to conceive of moral sentiments and to deduce "the ordinary duties of private life" (735); it thus created the possibility of social fabric. Education (science) was also "the great antidote to the poison of enthusiasm and superstition", a byproduct of fanatic preachers (748). Last but not least, Smith asserted that education guaranteed that citizens would retain the martial virtues valued by the sovereign.

3.2 Who is to Pay?

All these externalities of education notwithstanding, Smith argued that colleges and universities ought to furnish their own expenses, either from fees or honoraria paid directly to teachers, "this natural revenue" (716), or from a variety of public endowments. He noted that there is, however, typically no need for deriving higher education's revenues from the general revenues of society.⁴

3.3 Incentive Problems

In his discussion of educational institutions, Smith questioned whether public endowments affected the quality of teaching:

Have those public endowments contributed in general to promote the end of their institution? Have they contributed to encourage the diligence, and to improve the abilities of the teachers? Have they directed the course of education towards objects more useful, both to the individual and to the public, than those to which it would naturally have gone of its own accord? (716)

⁴ While Smith (*WN*, 735) favors the application of the benefit principle as a basic rule for higher education, he stresses that "the laboring poor, that is the great body of the people" may not have the means to become literate and numerate. "For a very small expense the public can facilitate and can even impose upon almost the whole body of the people, the necessity of acquiring those most essential parts of the education" (737). Such state intervention, Smith argues, is desirable because of the detrimental consequences of the division of labor on the human mind and, ultimately, the social fabric (734–35).

Smith answered his second question first:

In every profession, the exertion of the greater part of those who exercise it, is always in proportion to the necessity they are under of making that exertion. This necessity is greatest with those to whom the emoluments of their profession are the only source from which they expect their fortune, or even their ordinary revenue and subsistence. The endowments of schools and colleges have necessarily diminished more or less the necessity of application in the teachers. Their subsistence, so far as it arises from their salaries, is evidently derived from a fund altogether independent of their success and reputation in their particular professions. (717)

Appealing to individual rationality, Smith thus postulated that the payment mode affected the quality of teaching, which was more likely to be high when its suppliers competed for emoluments.⁵ "Sham-lectures" would simply not draw the crowds necessary for those who deliver them to survive in the profession; word of mouth would drive out the professor who shirks (720). With dwindling student numbers translating into loss of income, the credible threat of students voting with their feet would prompt teachers' exertion, assuring students and their parents that they are provided with a reasonable standard of instruction. The discipline of the market—the reputational enforcement of the quality of teaching would force teachers to perform at a high level. If, however, salaries were independent of the quality of teaching, then high quality could not be expected. Smith singled out the University of Oxford as a place where, in consequence of such a payment mode, "the greater part of the public professors have, for these many years, given up altogether even the pretense of teaching" (718).

One might argue that surely those teachers who did not apply themselves would be identified by their peers or by some authority and be dismissed. Not so, said Smith. Peers did not intervene, as intervention would have been incentive-incompatible for them:

⁵ "It is the interest of every man to live as much at ease as he can, and if his emoluments are to be precisely the same, whether he does, or does not perform some very laborious duty, it is certainly his interest ... either to neglect it altogether, or, if he is subject to some authority which will not suffer him to do this, to perform it in as careless and slovenly a manner as that authority will permit" (718).

If the authority to which he is subject resides in the body corporate, the college, or university, of which he himself is a member, and in which the greater part of the other members are, like himself, persons who either are, or ought to be teachers; they are likely to make a common cause, to be all very indulgent to one another, and every man to consent that his neighbor may neglect his duty, provided he himself is allowed to neglect his own. (718)⁶

Again, appealing to individual rationality, Smith confirmed the viability of collusion among faculty. Smith then addressed the obvious question of why persons extraneous to the faculty, say bishop, or governor, or minister of state, or their agents, that is, some independent supervisor, could not intervene and take care of professorial slackers. He suggested that, while supervisors could force a teacher to offer ascertain number of lectures, they did not have effective means to control their quality. To make matters worse, "an extraneous jurisdiction of this kind, besides, is liable to be exercised both ignorantly and capriciously" (718).

Smith thus provided a negative answer to his second question, claiming that endowments did not "encourage the diligence", nor "improve the abilities of teachers". In essence, Smith made a case for the reputational enforcement of teaching, which he identified as an experience good whose quality was hard to observe or verify. Third party enforcement through supervisors, Smith argued, was bound to be ineffective and likely to generate additional problems, such as administrators making decisions that they are not qualified to make. Such a shift of decision-making power would consequently lead to obsequiousness on the part of those potentially exposed to administrators' ignorance and capriciousness, and further detract from both the ability and the diligence of teachers (718–19).

Smith then turned to his third question, "Have [endowments] directed the course of education towards objects more useful, both to the individual and to the public, than those to which it would naturally have gone of its own accord?" Specifically, Smith considered whether endowments promoted curricular innovation. The answer was implicit in his discussion of the ways teachers engaged in the "pretense of teaching" (720)

⁶ Cognoscenti will note that Smith used a Nash equilibrium to model the idea: "that his neighbor may neglect his duty, provided he himself is allowed to neglect his own".

 $^{^7}$ The notion of collusion is well established in Smith's work. See, for example, Smith's (WN, 66–68) intriguing discussion of the bargaining between workers and masters.

by reciting the works of others and in his discussion of the evolution of curricular content throughout the ages (722–27). The answer was explicit in his discussion of "the improvements which, in modern times, have been made in several different branches of philosophy" (727). Smith contended that "the improvements … have not the greater part of them, been made in universities". In fact, "the richest and best endowed universities have been the slowest in adopting those improvements, and the most averse to permit any considerable change in the established plan of education". In contrast, poorer universities and their teachers, "depending upon their reputation for the greater part of their subsistence, were obliged to pay more attention to the current opinions of the world" (727).

Smith thus concluded that public endowments did not direct the course of education toward an improved curriculum that best served students, parents, and the public at large. Endowments then affected not only what faculty taught, but also how they taught it.⁸

Endowments perverted the raison d'etre of educational institutions. "The discipline of colleges and universities is in general contrived, not for the benefit of the students, but for the interest, or more properly speaking, for the ease of masters" (720). Thus, implicit in his analysis of the effects of public endowments on the quality of teaching and on the process of modernizing the curriculum was Smith's contention that public endowments failed to promote the goals of their institution. 9

⁸ A referee for this journal noted that the title of this section was "Smith on Educational Institutions", but that I discuss mostly colleges and universities. Smith indeed discussed educational institutions in general. However, he also argued that incentive problems were highly and positively correlated with endowments. Some universities had them, but most schools and colleges did not, or had "but a very small one" (WN, 716–17). Smith, incidentally, identified three other sources of incentive problems. First, professions such as law, physics, and divinity required "a certain number of years in certain universities" (719). Second, "the charitable foundations of scholarships, exhibitions, bursaries, &c. necessarily attach a certain number of students to certain colleges, independent altogether of the merit of those particular colleges" (719). Third, classes (and teachers) are mandated by a college. In all three cases, Smith was concerned about limitations of students' choice sets since these circumstances reduced teachers' incentives to worry about their reputations (See WN, 719–20 for a detailed discussion).

⁹ According to his biographer, Smith received during his years at Glasgow College more than half of his salary from fees (Rae 1895, 48–49). This was in contrast to the payment mode at the University of Oxford, the consequences of which Smith had experienced as student. Recall Smith's scathing comment on that university's professors.

The key to Smith's argument was that student fees were the more appropriate incentive structure, as students would flock to those teachers who took teaching seriously and kept up with an ever-accelerating knowledge base. Those teachers who did not would face empty classrooms. "Sham-lectures" would simply not cut the mustard. In short, Smith invoked the market as the guarantor of effectiveness in higher education and as the enforcer of good teaching and curricular innovation. Reputational enforcement would work only when the greater part of teachers' salaries came from fees and honoraria. Salaries based on seniority, endowments, or similar schemes that were independent of teachers' success and reputation were unlikely to promote the raison d'etre of educational institutions. ¹⁰

4 SMITH ON ECCLESIASTICAL INSTITUTIONS

4.1 Raison d'Etre

Smith discussed ecclesiastical institutions in book 5, chapter 1, part 3, and article 3, immediately following his discussion of educational institutions.

Throughout his discussion, Smith explicitly underlines the similarity of educational and ecclesiastical institutions, describing both as "institutions for the instruction of the people" (684) and potentially beneficial to society (768).

While he stressed the similarity of educational and ecclesiastical institutions, Smith also made clear their key difference: "[Religious instruction] is a species of instruction of which the object is not so much to render the people good citizens in this world, as to prepare them for another and a better world in the life to come" (740). In terms of our earlier distinction, Smith identified nonreligious instruction as an experience good and religious instruction as a credence good. A consumer of nonreligious instruction was likely to reap its benefits in this life. In contrast, one had to accept on faith the benefits of religious instruction. ¹¹

¹⁰ As I have argued elsewhere, there are important lessons here for contemporary higher education (Ortmann 1997b).

¹¹ Smith was quite aware that religious instruction, as an added bonus, could have tangible benefits. Specifically, affiliation with a sect could provide a social context much needed for those fleeing the countryside and in danger of sinking into obscurity and darkness (*WN*, 747).

4.2 Incentive Problems

Smith's discussion of preachers' incentives parallels, often explicitly, his discussion of teachers' incentives:

The teachers of the doctrine which contains this instruction, in the same manner as other teachers, either depend altogether for their subsistence upon the voluntary contributions of their hearers; or they may derive it from some other fund to which the law of their country may entitle them; such as a landed estate, a tythe or land tax, and established salary or stipend. Their exertion, their zeal and industry, are likely to be much greater in the former than in the latter. (740)

And two pages later,

The parochial clergy derive, many of them, a very considerable part of their subsistence from the voluntary oblations of the people: ...

The parochial clergy are like those teachers whose reward depends more or less upon their industry and reputation. (742)

Having established the outline of his argument, Smith examined the impact of "endowments" in more detail. The "teachers of a new religion" were bound to be hungry, had not given themselves up to indolence, and hence were able to "keep up the fervor of faith and devotion in the great body of the people", while the "clergy of an established and well-endowed religion" were likely to become unconcerned with their original mission, satiated and defenseless (740). 12

Predictably, such a clergy would—like joint-stock companies bogged down by their incentive problems—"call upon the civil magistrate to persecute, destroy, or drive out their adversaries, as disturbers of the public peace" (741). This strategy often succeeded because civil magistrates believed that established religious institutions had a stabilizing effect.

In sum, endowments and independent provisions neither promoted the end of the institution nor encouraged the diligence and commitment

¹² "Such a clergy, when attacked by a set of popular and bold, though perhaps stupid and ignorant enthusiasts, feel themselves as perfectly defenseless as the indolent, effeminate, and full-fed nations of the southern parts of Asia, when they were invaded by the active, hardy, and hungry Tartars of the North" (WN, 741).

of preachers. They did not guide the course of religious education in a direction that it would not otherwise have gone of its own accord. Or did they?

David Hume (quoted in WN, 743) had argued that perhaps it was for the better that established religious institutions received preferential treatment; the diligence and passion that hungry preachers mustered was bound to be a problem:

This interested diligence of the clergy is what every wise legislator will study to prevent; because, in every religion except the true, it is highly pernicious, and it has a natural tendency to pervert the true, by infusing into it a strong mixture of superstition, folly, and delusion. Each ghostly practitioner, in order to render himself more precious and sacred in the eyes of his retainers, will inspire them with the most violent abhorrence of all other sects, and continually endeavor, by some novelty, to excite the languid devotion of his audience. No regard will be paid to truth, morals, or decency in the doctrines inculcated. Every tenet will be adopted that best suits the disorderly affections of the human frame. Customers will be drawn to each conventicle by new industry and address in practicing on the passions and credulity of the populace. And in the end, the civil magistrate will find, that he has dearly paid for his pretended frugality, in saving a fixed establishment for the priests; and that in reality the most decent and advantageous composition, which he can make with the spiritual guides, is to bribe their indolence, by assigning stated salaries to their profession, and rendering it superfluous for them to be farther active, than merely to prevent their flock from straying in quest of new pastures. And in this manner ecclesiastical establishments, though commonly they arose at first from religious views, prove in the end advantageous to the political interests of society.

Not so, said Smith. As other authors (Anderson 1986; West 1990) have pointed out, Smith (WN, 742–46) countered Hume's argument with an efficient market hypothesis of religious ideas. The "interested and active zeal of religious teachers" could be dangerous only where "either but one sect [is] tolerated in the society, or where the whole of a large society is divided into two or three great sects; ... But that zeal must be altogether innocent where the society is divided into two or three hundred, or perhaps into as many as a thousand small sects, of which no one could be considerable enough to disturb the public tranquility" (745). Smith

argued that the competition of hundreds of other preachers would ultimately bring about "candor and moderation" among the teachers of each little sect who,

finding themselves almost alone, would be obliged to respect those of almost every other sect, and the concessions which they mutually find it both convenient and agreeable to make to one another, might in time probably reduce the doctrine of the greater part of them to that pure and rational religion, free from every mixture of absurdity, imposture, or fanaticism, such as wise men have in all ages of the world wished to see established. (745)

As he did for educational institutions, Smith thus favored reputational over third-party enforcement for ecclesiastical institutions. ¹³

5 Discussion

For all three institutions, Smith identified self-interested behavior as the driving force of incentive misalignments, which he believed to be ubiquitous, pervasive, and likely to produce poorly functioning organizations. In all three cases, he argued, the public had a vested interest in the provision of the services of these institutions, and that indeed these services had enough social value to warrant support from general revenues. However, in all three cases Smith suggested that private provision was possible and generally desirable.

Looking at the reality of private provision, Smith noted that the incentive structures he observed were counterproductive in all three cases. The monopoly rights given to joint-stock companies, by creating monopoly profits, blunted managers' incentives in the same way that guaranteed income blunted the incentives of teachers and preachers. These implicit incentive structures detracted from the diligence that all three principal

¹³ Smith (WN, 747) realized sects may nevertheless appeal to the anonymous and hence possibly amoral masses. He suggested two remedies: academic study and artistic exposure. He recommended the study of science and philosophy because "science is the great antidote to the poison of enthusiasm and superstition; and where all the superior ranks of people were secured from it, the inferior ranks could not be much exposed to it". He also promoted "public diversions" such as painting, poetry, music, and dancing because they drive out "that melancholy and gloomy humor which is almost always the nurse of popular superstition and enthusiasm" (748).

actors otherwise would have needed to apply and thus invited lack of diligence. Monopoly rights and endowments thus did not promote these institutions' ultimate raison d'etre. Monopoly rights did not advance the welfare of the country, nor did endowments direct the course of instruction toward objects more useful than those to which it would have naturally gravitated of its own accord. Institutions could, however, establish incentive structures that would prevent abuse and incentive misalignment, and Smith discussed alternative arrangements ("alterations") in all three cases. The discipline of markets, Smith argued, could induce both good teaching (and hence strengthen the social fabric) and free religious instruction of superstition, folly, and delusion (and hence strengthen the social fabric). Smith recognized as well that powerful forces made the implementation of such viable solutions difficult.

Why is this important and what can be learned that we did not already know? As indicated above, Smith understood exceptionally well the causality running from products to organizational form, the nature of moral hazard and quality assessment problems, and the comparative advantages of enforcement mechanisms. ¹⁴ Smith asserted that organizations, whether aiming for profit or paradise, are susceptible to the same afflictions, namely misaligned incentives. What distinguishes them is the nature of their wares and the incentive alignment problems they entailed. Incentive problems do not exist for routinized activities—inspection goods or services of sorts. However, if an institution's product is an experience or credence good, then incentive alignment problems are likely to occur—more so for those goods whose quality has to be accepted on faith than for those that can be experienced after purchase. Smith's sequencing of the discussion of joint-stock companies and educational and ecclesiastical institutions reflects his insight that the quality of these institutions' wares became increasingly less observable and hence entailed an increasing likelihood of misaligned incentives. Smith also recognized that the quality of experience or credence goods is best assured through reputational enforcement. Furthermore, third-party enforcement is likely to create additional incentive problems and thus be ineffective.

 $^{^{14}}$ Benjamin Klein and Keith Leffler (1981, 618 n. 5), whose article is generally considered the path-breaking work in this area, point out that Smith's discussion of efficiency wages in book 1 of WN anticipates the essence of their argument about the role of market forces in assuring contractual performance.

Previous authors have moved toward the interpretation suggested here, that joint-stock companies and educational and ecclesiastical institutions face similar problems, in that the self-interested behavior of the principal actors is likely to generate incentive-incompatible structures and poorly functioning organizations. However, the claim in the present chapter is more comprehensive and basic. I contend that Smith classified these institutions' incentive misalignments as problem isomorphs whose major distinction resulted from the goods they produced.

It turns out that Smith had encountered such problem isomorphs before. As I have demonstrated elsewhere, Smith discussed principalagent problems in his Lectures on Rhetoric and Belles Lettres, The Theory of Moral Sentiments, and early in the Wealth of Nations (Collings and Ortmann 1997; Meardon and Ortmann 1996a, 1996b; Ortmann and Meardon 1995). When in articles 1–3 of part 1, chapter 1, book 5 of WN, Smith discussed the incentive problems of joint-stock companies, teaching, and preaching, he was thus on familiar ground. Being able to fall back on old reasoning routines, he intuitively recognized that they applied (March and Simon 1993).

That people's activities, be they physical or mental, become routinized over time is generally accepted in a variety of literature (Margolis 1982; Pentland and Rueter 1994; March and Simon 1993; Cosmides and Tooby 1992, 1997). Smith, as is well-known to readers of this book almost always tried to identify the commonalities of seemingly disparate phenomena and understood intuitively that self-command or moral conduct had the same incentive structure as preaching and teaching. The process whereby an economic agent (e.g., a teacher, preacher, or citizen) came to regard a socially worthy action (e.g., giving a lecture or sermon really worth attending, or contributing voluntarily to the provision of a public good) as in his self-interest resembles closely the process whereby the moral agent comes to regard the moral injunctions of the "impartial spectator" as synonymous with his own selfcommand. When Smith (WN, 717) stated that "in every profession, the exertion of the greater part of those who exercise it, is always in proportion to the necessity they

¹⁵ Among the relevant works are Anderson and Tollison 1982, Anderson 1986, Rosen 1987, and West 1990. Gary Anderson (1986, 1079–80) in particular recognized that "the Roman church was a kind of spiritual equivalent of the East India Company monopoly, which Smith had extensively analyzed in the immediately preceding section in book V. Although he did not himself explicitly draw this analogy; the analogy is striking".

are under of making that exertion", he paraphrased the insight, expressed nearly two decades earlier in The Theory of Moral Sentiments, that in every situation, the exertion to act "morally" on the greater part of those who exercise it is always in proportion to the necessity that they are under of making that exertion (Meardon and Ortmann 1996a, 1996b). Forget about morality, forget about the provision of high-quality experience and credence goods if the incentive structures are not such that the necessary exertion pays off.

The incentive problem underlying self-command and moral conduct or (the origin and evolution of) standards of moral conduct, the promotion of particular manufacture, preaching, teaching, and all other services whose quality are adjustable are identical. Smith, whenever he came across a problem of that kind, intuitively understood the nature of the problem and followed a consistent reasoning pattern. He identified the (empirically observable) problem, considered the particular circumstances that created it, and identified the institutional arrangements that could overcome the problem. As regards the latter point, Smith's grasp of the subtleties of reputational enforcement (information flows, whether the game is finitely or indefinitely played) is remarkable.

6 CONCLUDING REMARKS

The present article is not an exercise in Whiggery in the tradition of Paul Samuelson (1977, 1987; Heilbroner 1979; see also Fitzgibbons 1995, 171). I do not take the insights of the economics of the last fifty years as a yardstick by which to measure how modern Smith's work is. Rather, I use modern agency theory as the conceptual lens that informs my reassessment of Smith's work on joint-stock companies, teachers, and preachers.

The present chapter is a stepping-stone toward a reassessment of Smith's oeuvre that uses the conceptual lenses of noncooperative game theory to argue that Smith anticipated much of what modern reputational theories of firms and society elaborate on (Ortmann and Meardon 1995; Meardon and Ortmann 1996a, 1996b; Ortmann 1997a; Holmstroem and Tirole 1989; Kreps 1990; Binmore 1994, 1997). It suggests

¹⁶ In fact, they can all be expressed game-theoretically as I have shown elsewhere in joint work with Stephen J. Meardon (Ortmann and Meardon 1995; Meardon and Ortmann 1996a, 1996b).

that Smith was a rather modern and innovative economist. Such interpretation is in sharp contrast to the verdicts of Joseph Schumpeter (1954) and Salim Rashid (1992).

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