

Work in Progress – Comments Welcome

**DIVINE ACTION, PROVIDENCE AND
ADAM SMITH'S INVISIBLE HAND**

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Abstract

Recent sustained attention the background of Adam Smith's invisible hand has not resolved its meaning. In particular the status of the older dominant interpretation that the hand is God's remains unclear. This paper argues that a more nuanced understanding of divine action, drawing on Isaac Newton's understanding of special and general providence is the key to understanding Smith's invisible hand. The invisible hand is the special providential hand of God, which works to maintain the stability of the system, for instance by restraining inequality and keeping capital at home. Viewing the hand in this way clarifies its relationship to Smith larger argument about the unintended consequences of self-interested human action in a free economy.

“Modern professors of economics and ethics operate in disciplines which have been secularised to the point where the religious elements and implications which were once an integral part of them have been painstakingly eliminated ... [scholars] either put on mental blinders which hide from their sight these aberrations of Smith’s thought, or they treat them as merely traditional and in Smith’s day fashionable ornaments to what is essentially naturalistic and rational analysis... I am obliged to insist that Adam Smith’s system of thought, including his economics, is not intelligible if one disregards the role he assigns in it to the teleological elements, to the invisible hand” Jacob Viner *The Role of Providence in the Social Order* 1972 p81-82

1) INTRODUCTION

Adam Smith’s invisible hand is perhaps the most famous image in economics, but one which has puzzled interpreters. It is also significant as focus for disputes over the capacities of markets. For some the Smithian hand summarizes the case for a market economy – Mark Blaug writes: “Under certain social arrangements, which we would nowadays describe as workable competition, private interests are reconciled with public interests as if by an invisible hand” (Blaug 1997 p60). For Deirdre McCloskey (2006 p456-8) the hand reconciles private virtuous action with the common good. Critics (such as Duncan Foley 2006) interpret the hand in a similar way but regard it as summarizing the errors of the case for the market economy; Adam Smith’s mistake which has cursed subsequent economic analysis.

The problem is that we still don’t know what Smith’s invisible hand means, despite huge amounts of ink spilt on the topic. 19th century interpreters emphasised the theological connections of Smith’s work – for Thomas Chalmers there was no doubt God was at work in a market economy: “ the greatest economic good is rendered to the community...by the spontaneous play and busy competition of many thousand wills, each bent on the persecution of his own selfishness ... which bespeak the skill of a master-hand, in the adjustment of its laws, and the working of its profoundly constructed mechanism” (Chalmers 1833 p238, 240). Richard Whately, holder of the first chair of political economy at a British University – the Drummond Professor at Oxford - interprets Smith as arguing that “Man is, in the same act, doing one thing by choice, for his own benefit, and another, undesignedly, under the care of Providence, for the service of the community” (Whately 1832 p94). Examples from influential 19th century economists could be multiplied almost indefinitely. Interestingly though, none of the early interpreters pay much attention to the invisible hand passages.

At a symposium to mark the 150th anniversary of the *Wealth of Nations* Jacob Viner emphasized Smith's providentialism embedded in a natural theological system, and identified the invisible hand with providence. Viner is emphatic: "the essence of Smith's doctrine is that Providence has so fashioned the constitution of external nature as to make its processes favourable to man, and has implanted ab initio in human nature such sentiments as would bring about... the happiness and welfare of mankind" (Viner 1927 p201-2), and: "The harmony and beneficence to be perceived in the matter-of-fact processes of nature are the results of the design and intervention of a benevolent God" (Viner 1927 p202).

Through the twentieth century fewer scholars have emphasised Smith's theological connections, and most recent work takes it as obvious that the invisible hand has no connection with God. For instance Karen Vaughn (1987) does not consider the possibility of divine involvement in her description of a process of social order emerging as an unintended consequence of self interested human action. Rothschild (1994) dismisses the suggestion that it might be the hand of God, and concludes after examining several other interpretations that Smith "did not particularly esteem the invisible hand and thought of it as an ironic but useful joke" (p319). Grampp (2000) focuses on the hand in the *Wealth of Nations* and argues that it makes a specific point about capital flows and national defence, and is not part of any general argument Smith might be making about self interest and social order. He dismisses far too hastily (two paragraphs on p449) the suggestion of earlier scholars he names (Viner, Spiegel and Evensky) that God has something to do with the hand. This is curious since he seems to concede that the hand is providential in the *Theory of Moral Sentiments*. Donald Winch (1996) wisely suspends judgement on the theological connections, as being outside his expertise.

Some recent scholarship seeks to understand Adam Smith better by placing his work in various 18th century contexts – including the scientific and religious context of the Scottish Enlightenment (for instance Stewart 2003, Waterman 2004, Hill 2001, Long 2006). This paper suggests that the key to understanding Smith's references to the invisible hand is an appreciation of 18th century natural theological accounts of divine action and providence, in particular the distinction between special and general providence. In a sense the paper develops Jacob Viner's insistence on the importance of the doctrine of providence for interpreting Smith. An understanding of the invisible hand as special providence clarifies Smith's larger argument about the consequences of self-interested human action in a free economy.

2) NATURAL THEOLOGY

There are many contexts for reading Smith but the most important for understanding the invisible hand is British tradition of scientific natural theology (Brooke 1991). This was the organising intellectual framework for the majority of British scientists from the 17th till the early 19th centuries including Francis Bacon, Robert Boyle, Isaac Newton, John Ray, and William Paley with William Whewell perhaps marking the end point. Natural theology is often misunderstood as a project of proving God's existence without recourse to revelation – in my view a vain and pointless undertaking. However the project of these British scientists was a different one of deepening understanding of God's nature and activity through studying God's creation. Such a project rests on the revealed doctrines of creation and providence. From the 17th till the 19th century natural theology functioned to legitimate scientific activity (e.g Boyle describing himself as a priest in the temple of nature), to provide a common language and non-sectarian religious basis for scientific work, and occasionally to suggest and select theories (e.g. the universality of gravity).

I argue (Oslington 2005 and forthcoming) that Adam Smith and other early economists should be placed in this tradition of natural theology. For Smith there is considerable biographical warrant for this, including his moderate Calvinist upbringing and interest in Stoic natural theological systems. We also know that the first part of Smith's Glasgow lectures which later developed into the *Theory of Moral Sentiments* and *Wealth of Nations* were on natural theology. A student John Millar reported, "His course of lectures ... was delivered in four parts. The first contained Natural Theology; in which he considered the proofs of the being and attributes of God, and those principles of the mind on which religion is founded" (reproduced in Dugald Stewart's *Account of the Life and Writings of Adam Smith*, published in Smith 1795 p274). The content of Smith's lectures on natural theology is an intriguing question which we might wish John Millar or Dugald Stewart to have elaborated on, but some indications can be gained from the published lectures of Smith's predecessors Gershom Carmichael and Frances Hutcheson. In Smith's own published works the standard language and arguments of the British tradition can be identified¹.

Whatever view one takes of Smith as a natural theologian, nobody disputes that that Newton was a central figure in that tradition. All I require for the argument of this paper is to show

¹ Placing Smith in the tradition of British natural theology does not depend on Smith being personally devout or orthodox in his Christian faith. It is difficult to judge Smith's personal faith on the evidence available.

that it is plausible that Smith's view of divine action and providence was influenced by Newton's.

It would be very strange if anyone in Britain in Smith's time could write on these matters without being influenced by Newton, but for Smith we have evidence that the influence of Newton was large and positive. We know that Newton was a scientific hero of the young Smith (Ross 1995 p55-7), that Smith was familiar with Newton's works through his Scottish interpreter Sir Colin Maclaurin as well as the original texts (Ross 1995 p99-101), that Smith's *History of Astronomy* essay set up Newton as the model for scientific enquiry, and that the first readers of the *Wealth of Nations* such as Governor Pownall commented on its Newtonianism (Ross 1995 p429)².

3) DIVINE ACTION AND PROVIDENCE IN NEWTON

Isaac Newton's view of divine action and providence is the background to the interpretation I am offering of Smith's invisible hand, and so must now be briefly outlined. Providence is one of the core doctrines of Christianity, with a long history. It is distinguished from the doctrine of creation, God's finished work, in that God's providential care for the world continues. It also differs from creation in that the created order is good, while the present order under God's care is not. Providence is also distinguished from the doctrine of redemption, God's restorative activity through Christ, as providence has more modest maintenance role. Helm (1993) is a good discussion of the doctrinal issues.

Newton affirms a strong version of the doctrine of providence. In his universe is that everything that happens is in some sense and act of God³. For scientific work a crucial

² Reading Smith as a Newtonian in his approach to divine action leaves open the question of how Newtonian his economics is in other ways. Smith's enthusiasm is for the Newtonian method, and analogies of content of specific theories such as between Smithian accounts of price formation and Newtonian accounts of gravity seem to me more tenuous. Interpreting Smith as a general equilibrium theorist on the basis of analogies with Newton's system has been rightly criticized by Redmond (1993) and Montes (2003).

³ This touches the question of theological voluntarism and its relationship to the development of modern science. Voluntarism emphasises God's arbitrary will over his intellect, and the dependence of the universe on this will. The argument goes that theological voluntarism implies a contingent natural order which is amenable to empirical investigation, and this encouraged the development of modern science. Harrison (1995, 2002) discusses the issue extensively and in my view persuasively. It seems doubtful that Newton was a voluntarist, and what influence any voluntarist elements in his theology had on his scientific work.

question is how regular or lawlike is God's activity. Newton along with many other British natural philosophers believed that explaining universe in terms of regular laws made divine involvement more rather than less plausible. Mechanistic images such as the clockwork universe showed the wisdom and power of God. In contrast European scientists such as Laplace believed explanation in terms of regular laws made God unnecessary.

Newton followed the theological tradition in distinguishing between general providence - God's care expressed in the regularity of the universe - and special providence - God's irregular acts. Newton sums this up nicely in correspondence: God is "constantly cooperating with all things in accordance with accurate laws, as being the foundation and cause of the whole of nature, except where it is good to act otherwise" (MS245 folio 14a in the Library of the Royal Society London, as quoted in Force 1990 p87). A similar view is expressed by William Whiston, Newton's successor as Lucasian Professor of Mathematics at Cambridge, who distinguishes between "God's ordinary providence displayed in lawful operation of secondary causes", and "God's special, direct interventionist providence" (*A New Theory of the Earth* 1708, quoted in Force 1990 p86). There is no sense in which any irregular actions of God undermine or are inconsistent with God's regular action. Both are equally and consistently acts of God⁴.

For Newton it is not just that special providential action is allowable, whatever that means for an omnipotent God, but that God has willed a universe where such action is required (Brooke 1991 p147). Newton could not see how anything other than a one-off divine action could set the planets in motion. Moreover, in the *Principia* Newton speaks the orbits of planets needing periodic adjustment, and of comets tails restoring matter lost by the Sun and planets (discussed Brooke 1991 p148). In Query 31 of the *Optiks* where Newton speaks of "irregularities" which may have arisen from the mutual interactions of planets and comets which increase till system "wants a reformulation" (the passage is in Janiak p138). The need for continuing divine intervention and these examples are discussed in Maclaurin's (1748) account of Newton's system, with which Smith knew well. Such examples were ridiculed by Leibniz who felt such running repairs reflected badly on God's design of the universe.

⁴ Miracles are distinguished by infrequency, rather than being violations of natural laws. Newton would have found Hume's framing of the problem of miracles strange indeed, and Hume's separation of the natural order from its creator theologically worrying.

Newton was fond of the analogy that God could move the universe as we move our bodies, although he rejected pantheism that made God the soul of the universe (Brooke 1988 p169). In Query 31 of the *Optiks* Newton describes God as a “powerful ever-living Agent, who being in all places is more able by his will to move the bodies within his boundless and uniform sensorium, and thereby to reform the parts of the universe, than we are by our will to move the parts of our own bodies” (Janiak p138). Another example of this body imagery is a 1692 letter to Bentley where Newton describes a “divine arm” placing planets (Janiak p100).

So a divine hand acting irregularly to maintain the order is perfectly legitimate within the Newtonian view of divine action, and has precedents in Newton’s own discussion of the planetary system. Was this what Smith had in mind? We must turn to the passages in Smith.

4) SMITH’S PROVIDENTIALISM

We now need to ask what view Smith took of providence, given that providence was one of the key doctrine for natural theologians, and Newton, and I would also argue Smith, were natural theologians. Newton’s doctrine of providence as we have seen distinguishes between special and general providence.

There can be do doubt of Smith’s attachment to the doctrine of providence.. His published works are so full of providentialist language that they can be read as developing the mechanisms divine of providence in the economic realm: Here are a couple of the many examples:

“All the inhabitants of the universe, the meanest as well as the greatest, are under the immediate care and protection of that great, benevolent ands all-wise Being, who directs all the movements of nature; and who is determined, by his own unalterable perfections to maintain in it at all times, the greatest quantity of happiness” (Smith 1959 p235).

“In every part of the universe we observe means adjusted with the nicest artifice to the ends which they are intended to produce, and admire how everything is contrived for advancing the two great purposes of nature, the support of the individual and the propagation of the species...[and studying this leads us to admire] the wisdom of man, which in reality is the wisdom of God” Smith (1759 p87).

Both these examples are from the *Theory of Moral Sentiments*, in the *Wealth of Nations* the providentialist language is more muted. The obvious explanation of is that the *Wealth of Nations* it is a work of economics rather than moral philosophy. Smith seems to have followed Newton who was expansive about theology in some of his works, especially when outlining methodology or defending it in correspondence, but hardly mentions theology in his major scientific treatise the *Principia*. Maclaurin (1748 p380) notes this difference across Newton's works observing that in the *Principia* Newton was "eminently distinguished for his caution and circumspection in treating of this subject [the chapter is entitled "Of the Supreme Author and Governor of the Universe]".

Another reason for the difference suggested by Viner (1927) is that Smith needed to make theological space in the *Wealth of Nations* for an exploration of the imperfections of the economic system. Imperfections and evil have to be dealt with in any providentialist system, as Smith and his contemporaries were aware – but this is not the place to go fully into Smith's theodicy of economic life⁵.

One explanation of the difference that doesn't work is that Smith later rejected the doctrine of providence between the writing of the *Theory of Moral Sentiments* and the *Wealth of Nations*. It doesn't work because Smith continued revising both works until his death, without toning down the providentialist language.

If we accept Smith's providentialism, then the next question is the relationship of the invisible hand passages to his providentialism. Most of the interpreters who favour a theological interpretation of the hand have tried to absorb the hand into the general providentialist theme of Smith's work. I will argue that this is a mistake; reading the passages against the background of the Newtonian theology of divine action and providence leads us to an invisible hand which is special providence, operating against, although ultimately supporting general providence in the economic realm.

⁵ There has been little discussion of Smith's theodicy, certainly in comparison to the large literature Malthus' theodicy. Waterman (2004) suggests that Smith can be read as offering a theodicy where markets restrain sin, in a similar way to the way government does for Augustine. Long (2002, 2006) also discusses theodicy. The subject needs to be explored further.

5) THE INVISIBLE HAND PASSAGES

(i) History of Astronomy

The first of the three appearances of the invisible hand in Adam Smith's work is the *History of Astronomy* essay, probably begun in the 1740s, polished in Edinburgh before reaching final form about 1758, and published in 1790 after Smith's death (Ross 1995 p99).

The *History of Astronomy* III 2-3 passage may be found on p48-50 of the standard edition of *Essays on Philosophical Subjects*. It appears as part of an argument about the origin of philosophy, in a section discussing an "invisible and designing power" "whose operations are not perfectly regular" (p49), and especially how the ancient polytheists viewed with such a power.

Smith suggested the ancient polytheists ascribe only the irregular events to the designing power. The text is: "For it may be observed, that in all Polytheistic religions, among savages, as well as in the early ages of Heathen antiquity, it is the irregular events of nature only that are ascribed to the agency and power of their gods. Fire burns, and water refreshes; heavy bodies descend, and lighter substances fly upwards, by the necessity of their own nature; nor was the invisible hand of Jupiter ever apprehended to be employed in those matters. But thunder and lightning, storms and sunshine, those more irregular events, were ascribed to his favour, or his anger"(p49-50)

To reinforce the point Smith adds "intelligent beings, whom they imagined, but knew not, ... did not to employ themselves in supporting the ordinary course of things, which went on of its own accord, but to stop, to thwart, and to disturb it. And thus, in the first ages of the world, the lowest and most pusillanimous superstition supplied the place of philosophy" (p50)

But then as philosophy develops the regular events come to be ascribed to this power. Smith suggests wonder drives the process of explaining the regular events, when security and leisure make it possible. The text is: "But when law has established order and security, and subsistence ceases to be precarious, the curiosity of mankind is increased, and their fears are diminished. The leisure which they then enjoy renders them more attentive to the appearances of nature, more observant of her smallest irregularities, and more desirous to

know the chain which links them all together. ...Wonder, therefore, and not any expectation of advantage from its discoveries, is the first principle which prompts mankind to the study of Philosophy, of that science which pretends to lay open the concealed connections that unite the various appearances of nature” (p50-51)

There could be some debate about the status of the irregular events after the rise of philosophy – Smith leaves this somewhat ambiguous – but in my view the natural way to read the passage is that the perception of divine involvement in the regular events is added to rather than replaces the perception of the divine in irregular events. Smith seems to be playing here with an image he will develop further in his mature works.

The most important discussion of the *History of Astronomy* passage is by Alec Macfie (1971), who incidentally corresponded extensively with Viner about Smith and theology. Macfie finds the reference to the invisible hand in the *History of Astronomy* puzzling, especially the way irregular events are attributed to the gods, seemingly in contradiction of the other invisible hand passages. In the end he suggests this early and somewhat ambiguous reference should not overshadow the later “classic” expressions of the invisible hand idea. Interpreting the hand as special providence in each of the three instances resolves Macfie’s contradiction, and brings the hand of the *History of Astronomy* into line with the other hands, to which we now turn.

(ii) Theory of Moral Sentiments

The second invisible hand passage is in the *Theory of Moral Sentiments* IV I 10 (Smith 1759 p185). It is a discussion of a rich man endowed with insatiable desires yet with a stomach of limited capacity, so that he consumes only as much as a poor man. It is in this sense that the rich are “led by an invisible hand to make nearly the same division of the necessaries of life, which would have been made, had the earth been divided into equal portions among its inhabitants, and thus without intending it, without knowing it, advance the interest of the society”.

The hand here is working against the rapacity of the rich, levelling out consumption, and maintaining the stability of the system. Smith understands that the stability a market economy depends on a modicum of justice and a not too obscenely unequal a distribution of consumption. This is why the hand intervening to restrain the consumption of the rich serves to maintain the stability of the market system.

A long line of interpreters have seen the hand of *Theory of Moral Sentiments* as divine. My interpretation is that it is special providence, balancing the general providential force of self interest in markets. It must be said though that the line between special and general providence here is a fine one, as it would seem the hand acting to restrain the rich acts fairly regularly, notwithstanding the eating habits of the rich in Smith’s day.

(iii) Wealth of Nations

The third and most quoted invisible hand passage is in the *Wealth of Nations* IV ii (Smith 1776 p456). It is part of a chapter on restraints on foreign trade where Smith describes the consequences of merchants seeking the greatest return on their capital. The individual merchant weighs the greater security of investing in domestic industry against the possibility of greater profits abroad, and is led by an invisible hand to invest domestically.

The text is “By preferring the support of domestic that of foreign industry he intends only his own security; and by directing that industry in such a manner as its produce may be of greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention” (p456). Smith comments “by pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good to be done by those who affected to trade for the public good” (p456) before returning to the theme of domestic verses foreign industry.

The dominant interpretation of this passage is that it expresses Smith’s theory of the market transforming self interest into unintended benefits for all. On this interpretation the invisible hand is a metaphor for the market or price mechanism or competition or something similar.

However there are a number of problems with such an interpretation, as pointed out in William Grampp’s (2000) detailed analysis of the invisible hand passage in the *Wealth of Nations*.

1) This is not what the passage actually says. Nothing is said in the passage about the price mechanism or competition or any of the other things the hand supposedly stands for. It is true that it is mentioned that the outcomes produced by the hand are unintended, but this does not narrow the field of possible interpretations much. In my view most of the popularity of this interpretation comes from illegitimately reading into the hand Smith’s arguments about markets elsewhere in the *Wealth of Nations*.

2) There is no mention of the hand in the earlier sections of the *Wealth of Nations* that discuss markets, competition and the price mechanism. If the hand is part of his argument about markets why does he only use it once, wait several hundred pages, and bury it in a passage about foreign trade?

3) Too much weight has been put on this phrase, “in this, as in many other cases” in making the hand into a general law. Smith simply suggests there are other cases, not that the hand is universal.

4) Too much weight has also been put on the “as if” qualification of the invisible hand that isn’t in the passage. The action is actually by a hand, not some diffuse process.

On the basis of these and other objections to the dominant interpretations, Grampp (2000) seeks another that is truer to the context. For him the invisible hand in the *Wealth of Nations* is “simply the inducement a merchant has to keep his capital at home, thereby increasing the domestic capital stock and enhancing military power” (p441).

I agree with Grampp that the invisible hand keeps capital at home, reinforcing the desire of the merchant for secure returns and against the desire for larger profits abroad. I would add though that this action of the hand is special providence, working against the general providential force of profit seeking.

6) A PLAUSIBLE INTERPRETATION?

I am interpreting the invisible hand as the special providential hand of God, which works to maintain the stability of the system, for instance by restraining inequality and keeping capital at home. This interpretation has a number of attractions.

Firstly, it gives due weight to providential aspects of Smith's work identified by many scholars, adding a decisive distinction between special and general providence. Such a distinction is well grounded in Smith's philosophical and theological context.

Secondly, it explains where Smith's hand language comes from – Newton's discussions of God moving parts of the universe as parts of a body. There is a strong link between Smith and Newton, and significantly Smith's first use of the hand image is a work which discusses Newton's scientific approach. A source in Newton seems more plausible than Rothschild's suggestion that it echoes Macbeth's "bloody invisible hand".

Thirdly, it fits each of the three invisible hand passages. Some of the other proposals, such as Grampp's, fit only one of the passages and create considerable interpretative problems for the other passages. These interpretive problems can only be avoided by the implausible suggestion that Smith's three references to the invisible hand are unrelated.

Fourth, it gives a plausible development of the idea over time in Smith. There is no need for a puzzling reversal of the meaning of the image, as suggested by Macfie (1971 p595). In each of the three passages the divine hand is acts irregularly to maintain the stability of the system. As we move through the three passages the description of the action of the hand becomes clearer, though it must be conceded that even in the *Wealth of Nations* discussion of merchants balancing security and profits nothing as detailed as the Newtonian description of the mechanism of comets shifting matter around the universe.

Fifth, this interpretation makes sense of lack of prominence of invisible hand in Smith's writings. If the hand represents irregular special providential action, then we would not expect it to be popping up everywhere in Smith's works.

Sixth, it deals with the ironic, almost joking tone which Rothschild sees in the passages. This tone expresses Smith's ambivalence about special providence; Divine intervention to

maintain the stability of the system is for Smith a wistfully expressed hope, rather than a certainty. Such a tone is appropriate as special providence is by definition unpredictable.

7) CONCLUSIONS

The meaning of the invisible hand in Smith is an interesting intellectual puzzle worth resolving. I hope that the interpretation offered here will be seriously considered, and even if found to be in need of modification, it will encourage further study of the theological context of Smith's work. Some obvious areas for future investigation are Smith's theodicy, the relationship of his approach to human ignorance and folly to the Calvinist tradition, and the role of the future life in his system.

Unlike many other interpretative puzzles, the meaning of the invisible hand matters greatly for arguments about free markets. It must be one of the most used yet least understood phrases in contemporary public policy discussion. A benefit of the interpretation offered here is that it detaches the general providential case for markets from the special providential invisible hand. The case for markets can then be evaluated on its economic and theological merits without debates about markets being short-circuited by friends or foes invoking dodgy versions of the invisible hand. On the interpretation offered here Smith's invisible hand is only needed because of the market does not have the capacity to create the conditions for its own stability. It matters that the hand does not matter as much as we might have thought to the case for free markets.

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