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Rediscovering the human and forgetting the natural in economics and finance

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Abstract:

When did finance stop thinking about behaviour? The ascendancy of the "rational man" model of finance has been strongly influenced by the notion of markets as being akin to natural systems. The question rapidly changes from asking when did finance stop thinking about behaviour to when did finance start thinking about itself as the motion of bodies in a vacuum? It is "the illusion of free markets" that creates the fundamental intellectual difficulties that made the "human" aspects of finance so quickly disappear during the 20th century, only the burst upon the scene when their absence gave rise to such damaging ideas, policies and laws. This paper will look briefly at how the desire of economics and finance to join the canon of natural sciences produced a discipline that slowly cut away the very ground it stood upon.

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Rediscovering the human and forgetting the natural in economics and finance.

Introduction

When did finance stop thinking about behaviour? It is an interesting question that has been thrown into high relief by the global financial crisis. The ascendancy of the “rational man” model of finance can be proven by the integration into the regulatory frameworks of Basel II, III and the Dodd-Frank legislation in the US. Finance, as a branch of economics, has been strongly influenced by the notion of markets as being akin to natural systems. The question rapidly changes from asking when did finance stop thinking about behaviour to when did finance start thinking about itself as the motion of bodies in a vacuum? It is what Harcourt (2011) refers to as “the illusion of free markets” that creates the fundamental intellectual difficulties that made the “human” aspects of finance so quickly disappear during the 20th century, only the burst upon the scene when their absence gave rise to such damaging ideas, policies and laws. This paper will look briefly at how the desire of economics to join the canon of natural sciences produced a discipline that slowly cut away the very ground it stood upon.

The Natural Order - Economics’ desire to be a science

Economics is a different discipline from accounting, and it is different from physics. This may be obvious but is important to state at the outset. It is also important to note that there has always been a tension between those that look at the system of commerce and those that account for it, either in the world of public finance or in private markets.

Economics sees its origin point as being Adam Smith’s Inquiry into the Causes of the Wealth of Nations (1776). The Smithian approach to economics has its origins in the area

of jurisprudence, ethics and philosophy. Smith spends large parts of his magnum opus outlining the many failures of the practitioners of political arithmetic, a form of early statistical analysis. The accountants and the practical men of commerce gave rise to political arithmetic. (Maifreda, 2012)

The gap between those that counted and those that theorised was minor in the 17th century. What was to become known as economics was emerging from wider political and legal developments. While international commerce developed, the world became less homogenous in its political and economic aspects. The Thirty Years War, the English Civil War and the various Anglo-Dutch and French-Dutch wars of the 1600s created new legal structures, a new concept of the state and new financial instruments. (Dickson, 1967) By 1694, if one were to focus on the English situation, it was clear that law, politics, science, war and the role of the state in everyday life and commerce was radically different to that of a hundred years earlier. Merchants began to write, either directly or indirectly, on the structures and systems of commerce. These works differed from those of the past since they were not just simple manuals designed to facilitate novices but were directed towards the governing elite and a wider audience of learned persons to argue for a unified approach to commerce. (Maifreda, 2012) This approach had much to do with the mercantile elites maintaining legally guarded rents or attempting to prevent government interventions in the forms of tariffs or trade restrictions from impeding their ability to generate and retain profits.

The approach taken by the “counters” in this exercise was seen as highly unorthodox both by the governing elites and by major scientists, such as Isaac Newton. Newton found the new study of commerce that would become economics to not be worthy of the description of science. It was not subject to the same testing and control conditions as his investigations into natural philosophy. As a result, economics was not included in his reorganization of the Royal Society. (Maifreda, 2012)

This did not mean that Newton was not a man of commerce. Newton was Master of the Mint, with responsibilities for all currency in circulation and the maintenance of specie convertibility. Newton’s approach to commerce was different from that of the political arithmeticians in so far as he required a control group in all instances, as in the experimental method. Newton felt that as no such control group could be created it was obvious that economics could not be a proper science. (Maifreda, 2012)

The political arithmeticians took their ideas from the developing medical profession. The ideas of William Harvey on the circulation of the blood (*De Mortu Cordis* (1628)) with its new understanding of the interconnectedness of the body had a strong influence on early economic thinking. The medical analogy, or metaphor, as used by many authors, especially on the topic of finance and banking took hold during the 18th century. (Redman, 2003) The political arithmeticians were largely practitioners. They may have been informed by medical analogy but the basic blocking and tackling of commercial enterprise was their daily activity. These merchant authors were categorically rejected, as was their method, by Adam Smith, who indicted their technique as unscientific. Economics, until Keynes, was

decoupled from its early modern past. The discipline takes Smith, his popularisers and his improvers as the canon of economic thinking abandoning all that came before as erroneous or irrelevant. (Redman, 2003)

How does this concern Adam Smith and the rise of modern finance? Smith's ideas were located within the framework of existing natural and political philosophy. The two most important influences on Smith were David Hume and Francois Quesnay. Hume's understanding of the operation of the economy and in particular the monetary system was informed by the metaphor of the circulatory system. Quesnay was court physician at Versailles as well as the author of the famous *Tableau Économique* (1758). (Harcourt, 2011) The progress of this "naturalisation" of economics was rapid and quite extensive. Smith not only took on the notion of an economy as being an entirely natural system, subject, as it were, to the rules of something akin to an economic Boyle's Law, but he went one stage further.

Smith was, as is any author in any context, strongly influenced by the idiom of his time. Smith's naturalistic understanding of economics was based on his meetings and correspondence with Quesnay, which date back a decade before he wrote *The Wealth of Nations* (1776). It is important to note that there is a difference between Smith's naturalistic understanding of economics and his use of rhetorical tools. (Harcourt, 2011) Smith's understanding of the operation of an economy was essentially a combination of medical analogy (a natural organic system) and the ethical/legal framework of natural law as interpreted by the Scottish Enlightenment. Interestingly, Smith's rhetoric was significantly different to his hybrid of organic natural systems and Newtonian expression. The use of the Newtonian idiom in the 18th century was quite common and was in keeping with Smith and Hume's desire to embrace Baconian science and the scientific method. The idea that the arts and sciences were to be seen as independent of one another would be seen as illogical at the time. Newton's own works, though owned by Smith, were largely unread with only the *Opticks* (1704) showing evidence of having been annotated and read within his personal library. Newton's discoveries in the area of classical mechanics and most especially calculus, contained in the *Principia Mathematica* (1687), appear not to have been read or at the very least seriously engaged with by Smith. (Redman, 2003) This did not prevent Smith from using Newton's language. There are two very important implications of Smith's understanding of knowledge and use of language. Smithian language allowed economics in the future to develop an orientation towards becoming more like the physical sciences. The clearest articulation of this being in the late 19th century by F.Y. Edgeworth in his *Mathematical Physics* (1881) text on applying mathematical principles to a social context. Even the idea of equilibrium, a concept at the core of economics, had a profoundly different meaning to Smith than it would to a physicist, a member of the marginalist school or a modern scholar. (Redman, 2003) Equilibrium was not an abstraction but a concept of balance based on values and principles of fairness obtain through a philosophically traditional *via media*. Smith's language may be modern but the intellectual synthesis that gave the *Wealth of Nations* (1776) its power was early modern.

Smith himself would not have imagined the level of specialisation that would take place in academic life and that an economist of the future would only be an *economist*. The closing off of the discipline to other methods and the desire for the discipline to achieve the purity and recognition of a physical science allowed what began as rhetoric to become the defining feature of the analysis. Smith and the early economists firmly placed the idea of the market and the economy within the realm of natural systems. This was a habit of thought to be embraced by Bentham and Mill during the first half of the 19th century. (Harcourt, 2011) This habit of naturalism ignored several important aspects of commercial activity: law, a non-mechanistic notion of human behaviour, ethics, politics, history. One must only look at the radical critique that Henry Thornton, an active City banker, provided of Adam Smith in his *Paper Credit* (1802) to see that those that were active in commerce and banking still took a profoundly different view of the operation of the market and the economy: Thornton argued that Smith's understanding of banking was largely in error.¹ (Murphy, 1996) The discipline was now set on a course where theory and commercial practice could quickly part company.

Economics and finance, though obviously intertwined, began to diverge during the first half of the 20th century. The behaviour of banking and the role of the interest rate came under more precise scrutiny. In the Anglosphere this related to the debates led by Irving Fisher (*The Theory of Interest* (1930)) and Frank Knight (*Risk, Uncertainty and Profit* (1921)), and to the ongoing discussions by Keynes of money and interest during the 1920s and 30s. This coincided with the injection of the Austrian School in 1930s into British intellectual life, in the form of Friedrich von Hayek at the London School of Economics. (Roncaglia, 2001) As these debates on money, interest, central banking and the role of the state took place, a new sub-discipline emerged that was to develop into its own field: finance. While accounting and associated commercial disciplines flourished during the opening decades of the 20th century they were largely constrained to commercial colleges or at yet only fledgling business schools. This changed during the 1920s and 30s as places such as Harvard Business School began to expand and develop. In 1931 the MIT Sloan School of Management began executive courses. Venture capitalism began with Georges Doroit and American Research and Development Corporation. (Ante, 2008) It was clear that the science of the practice of business, with the incorporation of high speed communications, mass production and mass employment into commerce, was now departing from the "high theory" as G. L. S. Shackle (1967) would describe it so many years later.

The crucial junctures were reached through developments in theory. Finance evolved into its own space and then back toward economics via theoretical changes in its own field and in economics. The 1958 Modigliani-Miller paper created a firm and lasting foundation for finance as a subject within its own right. At the same time economics embraced three traditions, cleaving it from finance (for a moment): Keynesianism, General Equilibrium and Monetarism. Up until the reconciling of micro and macroeconomics, the advent of the Lucas Critique and the dawn of the Rational Expectations Revolution in the 1970s, finance

¹ Some consideration must be taken for the differences between the Scottish and English banking systems but even accounting for that, Thornton's critique of Smith's understanding of high finance, money and banking was quite damning.

and economics remained distant relatives and sometimes rivals. (Roncaglia, 2001) Rational Expectations, the new econometric techniques of the economics discipline and the Efficient Markets Hypothesis and the discovery of the Black-Scholes equation allowed economics and finance to coexist once again. Ultimately, this was the most perfect articulation of the naturalist position, where there is a market that approximates a Cartesian Plane and market participants behave in a fashion typically described as *homo economicus* - economic man. While this nexus provided economics with new-found access to the commercial world and finance with greater academic respect, it also turned it into the *Fachidiot* that Smith would have been appalled by. The 2008 crisis practitioner authors such as George Soros (2003, 2009, 2012) have highlighted the need for a new approach to both finance and economics. While finance has taken this challenge seriously, there is evidence that economics is responding more slowly and legislation still lags behind.

While it is important to note the height of the naturalist approach was during the 1970s-2000s, the process was by no means pre-determined. The 1930s, in addition to providing the space for finance to develop as a discipline was also a time when economics attempted to engage with its past and reverse the trend towards removing the human. The work of Keynes provides the clearest example of that rediscovery of the human in economics.

Reconnecting with the past - Keynes, probability and ethics²

Keynes, to use the description provided by Skidelsky (2003), was an unusual economist, believing that economics was not solely to be concerned with matters relating to the “allocation of scarce resources” but to have higher and nobler aims. As can be seen in Chapter 12 of his *General Theory* he had a significant knowledge of the history of economic thought. A useful introduction to Keynes’ epistemology is Skidelsky’s summary of his view of economics:³

Like Marshall, Keynes believed that mathematics were useful as a check on one’s thoughts; he did not think his thoughts mathematically. He allowed his mathematics to rust away because, unlike Edgeworth, he was not interested in ‘mathematicising’ the social science. He believed with Foxwell that ‘economics ... belongs to the art of managing public affairs by application of sound reasoning to the whole *corpus* of experience’, though he would never have claimed, as Foxwell did, that it was not a branch of logic. Good economic performance, he thought, required an amalgam of intuition and logic applied to a wide range of facts, not to simplified and artificial hypotheses.” (Skidelsky, 2003: 459-60)

Keynes’ understanding of the responsibilities of the economist, both as thinker and policymaker centered around his deep-seated notion of ethics and teleology. These notions were largely the product of his life-long interaction with the Bloomsbury Group and the “Bible” of his Cambridge youth – G. E. Moore’s *Principia Ethica* (1903). Keynes’ entire approach to economics returned again and again to this volume and its profound impact on his life: it effectively became his social, political and economic creed. During the negotiations for the International Monetary Fund he reflected again on the premise in his work the “Economic Possibilities for our Grandchildren” (1930). This work found the root of the economic problems facing Depression era Britain in a fear of consumption. “To achieve ‘capital saturation’ as quickly as possible, so that mankind could confront its permanent problem – ‘how to live wisely and agreeably and well’ – was the overriding aim of his economic statesmanship.” (Skidelsky, 2000: 278) The final objective was to make Moore’s worldview in the *Principia Ethica* possible. In his letter to T. S. Eliot (a regular

² It is important to note that Continental European economics never abandoned the past intellectual structures as the English tradition did during the 19th century. The German Historical School, with as diverse a membership as Karl Marx, Wilhelm Roscher, Gustav Schmoller and Heinrich Pesch in Germany, John Kells Ingram in Ireland and Richard T. Ely in the US and proximate thinkers such as the earlier Friedrich List of Germany and the later Karl Weber and Joseph Schumpeter. Similar intellectual movements existed in Italy and France, with a greater tension between the heirs of Quesnay, Turgot, Say and DuPont and the heirs of Colbert.

³ The third part of Skidelsky’s three-volume study of Keynes has proved indispensable to this study, as the relevant portion of one of the most recent and comprehensive of Keynes’s biographies, which reproduces in full many essential primary documents considered here:

Skidelsky, Robert. *John Maynard Keynes: Fighting for Freedom, 1937-1946*. Volume III. London: Penguin Books, 2000.

correspondent of the Bloomsbury group), Keynes stated that “full employment policy by means of investment was only one particular application of an intellectual theorem. You can produce the result just as well by consuming more and working less.” (Skidelsky, 2000: 279) It was this objective to “live wisely and agreeably and well” that was the logical end of economics. It is also the source of his consistently negative approach to the “Benthamite calculus”, Keynes’s description of the purely utilitarian approach, which he sought to challenge and rise above.

The acquisitiveness of the “Benthamite calculus”, or to use the Aristotelian classification of the vice of *pleonexia*, was the major failing and error of economics in the mind of Keynes. In one of his rare criticisms of Moore he accuses him of having one foot on the threshold of heaven and the other in the “Benthamite calculus”. Keynes’ epistemology, though heavily influenced by Moore, drew heavily on earlier philosophical systems. In his *Treatise on Probability* (1921), Keynes combined his affinity for Moore with a older intellectual pedigree – the early modern philosophers Leibniz, Bernoulli and Laplace. As Skidelsky (2003) states about the *Treatise*:

A *Treatise on Probability* can be seen as an exploration of what it means to behave rationally under varying conditions of knowledge, ranging from certainty to uncertainty. But it was not a complete theory of rational behaviour. In Keynes’s philosophy, what it was rational to do was jointly controlled by probability and ethics. In deciding on a course of action, a person had to make two decisions: what were the most likely effects of one’s actions? And would those effects make the world a better place? Rationality, in other words, had reference to both means and ends. This is in sharp contrast to modern economics, which takes ends as given (that is, as purely subjective) and focuses solely on the rationality of means. That Keynes’s major philosophical work was in the sphere of ‘practical’ rather than ‘speculative’ ethics indicates his orientation towards the world rather than the cloister. But he never lost his sense of the ends to which economic life was directed. And for an economist, he was unusually alert to the ethical costs of social progress. (Skidelsky, 2003: 283-4)

Ultimately, “Keynes thought of economics much as he thought of probability theory: as a logic of non-conclusive arguments. In the history of public language this comes closest to the Aristotelian notion of the *enthymeme* – a ‘rhetorical logic’, appropriate to reasoning about ‘things which are variable’, and taking its premise from the audience’s stock of social knowledge.” (Skidelski, 2003: 469) Keynes’ epistemic basis for economics was in the field of ethics. He was a mixture of the Aristotelian and the Moorite. The recurrent theme in Keynes’ interactions was a combination of the desire for economic stability and growth with this distaste for the changes in the moral and ethical framework he witnessed during the Interwar period and in his mind allowed communism to become an appealing alternative. Moore was Keynes’ insulation from what were the equally false credos of communism and Christianity. One may cite in support of this two incidents, one in April of 1934 and the other in September 1938:

At dinner Keynes said to Eliot [T. S. Eliot], 'You have brought up again one of the primal questions, & nobody has even tried to consider it.' No, replied Eliot Keynes told Eliot that 'he would be inclined not to demolish Xty [Christianity] if it were proved that without it morality is impossible'/ He said to Virginia [Woolf], 'I begin to see that our generation – yours & mine...owed a great deal to our fathers' religion. And the young, like Julian [Julian Heward Bell], who are brought up without it, will never get so much out of life... We had the best of both worlds. We destroyed Xty & yet had its benefits.' Then Julian Bell came in and Keynes turned to 'the economic question: the religion of Communism'. Marxism was 'the worst of all & founded on a silly mistake of old Mr. Ricardo's which M [Keynes] given time will put right. And then there will be no more economic stress, & then – ? How will you live, Julian, you have no moral strictness?' Julian replied that the absence of the old morality had landed his generation in psychoanalysis, but that 'I prefer my life in many ways.' (Skidelsky, 2003: 515) [Originally written in 1934.]

A further basis for the examination of Keynes' internal motives and of his view of the ontology and teleology of political economy is found in this second statement. It was written in September 1938 following Keynes' reading of David Garnett's memoirs.

... it follows that we were amongst the first of our generation, perhaps alone amongst our generation, to escape from the Benthamite tradition. In practice, of course, at least so far as I was concerned, the outside world was not forgotten or forsworn. But I am recalling what our Ideal was in those early days when the life of passionate contemplation and communion was supposed to oust all other purposes whatever. It can be no part of this memoir for me to try to explain why it was such a big advantage for us to have escaped from the Benthamite tradition. But I do now regard that as the worm which has been gnawing at the insides of modern civilisation and is responsible for its present moral decay. We used to regard the Christians as the enemy, because they appeared as the representatives of tradition, convention and hocus-pocus. In truth it was the Benthamite calculus, based on an over-valuation of the economic criterion, which was destroying the quality of the popular Ideal.

Moreover, it was this escape from Bentham, joined with the unsurpassable individualism of our philosophy, which has served to protect the whole lot of us from the final *reductio ad absurdum* of Benthamism known as Marxism. We have completely failed, indeed, to provide a substitute for these economic bogus-faiths capable of protecting or satisfying our successors. But we ourselves have remained--am I not right in saying *all* of us?--altogether immune from the virus, as safe in the citadel of our ultimate faith as the Pope of Rome in his. [original emphasis] (Keynes, 1949: 96-7)

According to Keynes' work on economics, the discipline was part of the framework of ethics and logic. The classical work of Aristotle may be considered the first exposition of this framework of natural law and the allocation of scarce resources. Aristotle's purpose was not the maximisation of personal consumption but the leading of the "good" life.

Approaching the Aristotelian - Re-uniting with a wider understanding of economics

The concept of natural justice was at the heart of Aristotle's philosophy and this was to manifest itself in the form of laws that were created to benefit the common weal. Natural justice, and its instrument, natural law was to be a universal law of peoples, a *ius gentium*, a law not limited to individual city-states or municipalities. Positive law, or the law of man, was limited to those parochial concerns. The issue of *iustia distributiva* was part of this framework. Aristotle states:

For if the people involved are not equal, they will not receive equal shares; indeed, whenever equals receive unequal share, or unequal shares, in a distribution, that is the source of quarrels and accusations. (Aristotle, 1990: 255)

And further:

For the one who receives an unjust share does not do injustice, but rather the one who willingly does what is unjust, i.e. the one who originates the action; and he is the distributor, not the recipient. Further, if the distributor judged in ignorance, he does not do injustice in violation of what is legally just and his judgement is not unjust; in a way, though, it is unjust, since what is legally just is different from what is primarily just. (Aristotle, 1990: 263-4)

To Aristotle the supply of wealth to the household⁴ was through nature and thus the property that is the creation of nature and is held by the individual constitutes wealth. Aristotle develops this idea into the areas of acquisitiveness, which is the classical Greek vice of *pleonexia*, which was aptly translated by Nietzsche as *haben und mehrwollhaben*. This vice was contemporaneous with the Aristotelian concept of money, which was an unnatural source of wealth as its process of wealth creation was the product of unequal exchange and thus was to be considered unnatural. This interpretation of money as unnatural would influence the early thinking on financial matters such as usury and the declaration by the Schoolmen and other early economic commentators that money was sterile. This occluded

⁴ One may cite in this connection the etymology of the word economy. The earliest use of the term in its modern sense was during the middle of the 17th century by Thomas Hobbes (1651) in the *Leviathan* (II.xxiii.124). The *Oxford English Dictionary* provides the following history of the origin of the word:

ad. L. *œconomia*, ad. Gr. οἰκονομία, f. οἰκονομος one who manages a household (usu. spec. a steward), f. οἶκο-s house + -νόμος, f. νέμειν to manage, control. The Gr. οἰκονομος was adopted in classical Lat. as *œconomus*, but seems to have been re-introduced into med.L. from contemporary Gr. (in an ecclesiastical sense) with the phonetic spelling yconomus, whence the early Fr. and Eng. yconomie as forms of this word.

In Christian Latin the accepted transl. of οἰκονομία, was dispensatio (cf. L. dispensator = Gr. οἰκονομος steward); hence in certain Theol. senses economy and dispensation are used convertibly. (*Oxford English Dictionary*, s.v.)

judgement existed well into the nineteenth century. As will be discussed in the final chapter of this work, in the seventeenth century John Locke also continued to think of issues relating to currency and the financial system in these Aristotelian and Scholastic terms even at the height of the English Financial Revolution.

The evolution of Aristotelianism and natural law took shape through the work of the stoics, most notably Cicero, and its subsequent synthesis with Christianity under Thomas Aquinas. The Thomistic system works in conjunction with the Judaeo-Christian-Platonic framework constructed by Augustine. The city of man was a natural necessity and was to be compared to the city of God with obligations placed upon the prince to act justly. To act in a manner that was just was to be revealed through divine revelation and reason. The acquisition of knowledge for this purpose of behaving justly and leading a good and natural life was an essential component of this system of thought. Through this framework of rationality informed positive law the achievement of a just order could be possible. The further developments of this theory were made by the late Scholastics and the Renaissance utopian humanists and finally in the rights between men and states (peoples) that was developed by the Early Modern thinkers Althusius (1557-1638) and Grotius (1583-1645). This method of modern natural law thinking eventually was incorporated into the work of Adam Smith, which formed the foundation for modern economics.

The objective of Aristotle's system was for the individual to achieve a collection of Hellenic virtues, of them, that of *sôphrosunê* was the highest. This consisted of the ability to wield power but not abuse and embodied the restraint through reason. This was linked to the other Platonic virtues of courage (*andreia*), wisdom as manifested in the knowledge of the good (*sophia*) and the proper allocation of the soul, commonly translated as justice, *dikaiosunê*. These virtues were related directly to the individual *polis*. Though these virtues were considered limited to the *polis* of the citizen, a parochial setting, they can be universalised. The objective of Aristotle's ethical investigations was to determine the best way to live the good life. The motivations of individuals are, of course, extremely important when discussing this topic. For a discussion of the immediate reasons behind human action and the concept of obligation, one recommends that the reader refer to the work of John Finnis in *Natural Law and Natural Rights* (1980) and H.L.A. Hart in *The Concept of the Law* (1961).

Motivations and the difficult mixture of concepts such as the law, justice and morality, pose an especially challenging mélange in the absence of rules (i.e. existing positive law or legal precedent) or in a situation which may genuinely be described as *de novo*. In these circumstances, Aristotelian ethics oblige the individual to behave according to right reason, *kata ton orthon logon*. To act justly one must measure acts of injustice with suffering injustice; one must assess courage against rash judgement and one must gauge generosity against niggardliness. Rawls' original position argument, when placed in an environment where rules are absent and facts are murky, comes up against the harsh daylight of complexity and is found wanting. The ability to exercise collectively all the virtues of the intellect and the self is summed up in the final term of virtue conferred by Hellenic

system: - the manifestation and use of right reason, *phronêsis*.⁵ The consequence of obtaining the virtue of *phronêsis* is that one can therefore avoid the vice of *pleonexia*, since this is a plainly preventable through the application of *sôphrosunê*. The ultimate aim of action is how it relates to the good and obtaining of the knowledge to achieve the good. The teleological aim is not purely pleasure or comparative happiness, which is dependent upon time, mores and location but the excelling at the achievement of the tool of right living. The objective is the achievement of the state of *eudaimonia*.⁶ (MacIntyre, 2007)

Augustine inherited the Hellenic tradition and was the product of the late classical Roman system of thought. The Stoics' philosophy, in the form of Cicero, was made evident by Augustine's approval of Cicero's interpretation of moral virtuousness as existing in right reason and with this term defined as being a reason that is unclouded by passions and the quiet domination of rational resolve. Actions were defined along similarly Hellenic lines but with the addition of a Christian dimension: "Acts are good when they are accorded with right reason by virtue of it having with the immanent principle (*logos*) of the world and this with the moral law, understood properly embodied in the *respublica*." (Hundret, 1992: 88) Man need to engage with his ability to self-govern. The lack of self-government was the defining characteristic of the City of Man as opposed to the City of God. Augustine defines the situation of man as such:

There is nothing else that now makes man more miserable than his own disobedience to himself. Because he would not do what he could, he can no longer do what he would. It is true that even in the Garden, before man sinned, he could not do everything; but he could still do all he desired to do, since he had no desire to do what he could not do. It is different now. In too many ways not to mention, man cannot do what he desires to do, for the simple reason that he refuses to obey himself; that is to say, neither his spirit or his body obeys his will. (Augustine, 1958: 11.15)

The Ciceronian system of morality is clearly present in Augustine's thinking and this system is visible in Aristotle, while at the same time this framework was modified. The Roman rhetorical tradition was rejected, as it did not hold fast to its own system of moral obligations for quiet rational resolve and self-government. To Augustine, the canonical stories of Roman virtue, of Cato and Lucretia, were the embodiment of the lack of unity of thought and action, and this flaw thus resulted in the suicides of the two characters concerned. This again was the reason for the endless failure of the City of Man. The motives of man and his city would form the foundations of the early modern discussions of the state and moral virtue.

⁵ To this framework of virtues, *sôphrosunê*, *andreia*, *sophia*, *dikaïosunê* and *phronêsis* one can add the Christian virtue of *caritas*, added to the Aristotelian system by the work of Aquinas.

⁶ *Eudaimonia* is the happiness that comes from the knowledge that one has achieved the ability of engaging with the good and living the good life. It is attained through the acquisition of all the necessary Hellenic virtues.

The Roman, Hellenic and early Byzantine traditions were incorporated into the main corpus of ethical, legal and *economic* thought of the High Middle Ages. Raymond de Roover (1955) clearly states “that Aquinas was the founder of a school and that his doctrines were further elaborated and refined by his followers.” (De Roover, 1955: 162)

It should be added that these followers continued far beyond the Middle Ages until well into the seventeenth century. Moreover, some of their important economic doctrines were taken over, with only slight modifications, by the philosophers of natural law, such as Hugo Grotius (1583-1645) and Samuel Pufendorf (1622-94), who were still Aristotelians, even if they were opposed to scholasticism. (De Roover, 1955: 162)

The Schoolmen in their teaching of law and ethics considered the subject of political economy to be an important appendix to those subjects. Aquinas (1226-1274) placed economics within his universal scheme of thought and the pursuit of material gain was to be governed by the principles of justice and grounded in the concepts of private property and exchange. Material gain was not to be the sole objective of the individual but only a means to an end. That end was the *summum bonum*⁷ (lit.: final end) of salvation. As stated below this is the method of achieving *hominem integrum* (lit: complete human). San Bernardino of Siena (1380-1444) begins to develop a theory of value based upon usefulness, scarcity and agreeableness (*virtuositas, raritas* and *complacibilitas*). Bernardino also condemns the practices of persons attempting monopoly rents while commenting on the just price of a good being determined by a common estimation of the community. This revulsion at the presence of a monopoly continued well into the sixteenth and seventeenth centuries with works of Thomas Cardinal Cajetan (1469-1534), Juan Cardinal De Lugo (1583-1660) and Giambattista Cardinal De Luca (1613-1683).⁸ In addition this, his theory of the difficulty in the production of goods affecting supply and therefore price, was to be seen partly in Hutcheson and Smith and fully outlined in Ricardo’s *Principles of Political Economy* (1817).⁹ The Scholastics and their broader system of thought came into question during the later 17th century¹⁰, becoming largely associated with the issue of usury laws. This connection had less to do with the writings of the late Scholastic authors and those who were members of the School of Salamanca that

⁷ In the framework of the discussion of economics and international law this can be considered equivalent to *finis bonorum*, which is the final good determined by that quiet rationality of Augustine.

⁸ These late Scholastics may be considered to be almost neo-Thomistic in their thought, in so far as they were responding and reacting to dramatic changes in European ontology as a result of the Reformation. That, in conjunction with dramatic changes in politics and the discovery of the scientific method, altered their methods of engaging with philosophical, political, legal and social questions. One can only look at the robust defence of the work of Descartes (1596-1650) by the Jesuits of the University of Avignon in the late 17th and early 18th centuries.

⁹ See Chapter 20.

¹⁰ It is useful to quote De Roover on one of the fathers of international law (see *De Jure Belli Ac Pacis Libri Tres* (1625), this constitutes one of the first modern expositions of international law) at this point: “At any rate, Hugo Grotius or de Groot deserves a niche in the gallery of famous economists. One can hardly classify him as a mercantilist; he was rather an Aristotelian who used scholastic methods to defeat scholasticism.” (De Roover, 1955: 181)

with the 1745 encyclical of Pope Benedict XIV, *Vix Pervenit*, which re-asserted the dogma related to usury. As De Roover makes clear in his study, the Scholastics' system lacked a sufficiently robust intellectual apparatus to compete with the empirical, project-driven economics of the Mercantilist period. The Schoolmen, in his view, overly concerned themselves with ethical matters (through the lens of jurisprudence) and left public policy and the methods of implementing policy in the hands of largely incompetent and inefficient government authorities; paralysis, as opposed to the Roman and Hellenic inspiration, was engendered by an excessive focus on what ought to be as opposed to what was the reality. Even with this indictment "modern economics owes the Schoolmen and their successors a greater debt than is commonly acknowledged." (De Roover, 1955: 189)

This traditional Scholastic interpretation of jurisprudence was handed down to Adam Smith through his teacher, Francis Hutcheson (1684-1746). Hutcheson's major work, *A System of Moral Philosophy* (1755) drew heavily on the work of Pufendorf, who himself relied heavily on Grotius. "Hutcheson . . . followed very closely the natural-law theory of value and price as developed by Pufendorf and Gershom Carmichael [Hutcheson's immediate predecessor], in terms of scarcity, demand and supply" (Hutchison, 1988: 195) Work by Pesciarelli (1999) illustrates this intellectual linkage from Pufendorf to Hutcheson to Smith rather elegantly:

The first level, to which he gives the most detailed treatment, is that of the measure of value, with which he deals almost exclusively in the chapter "The Value of Goods and of Coin." The second level, that of the source of value, is analyzed in the chapter "The Duties and Rights of Masters and Servants."

As for the measurement of value, I have shown elsewhere (Pesciarelli 1986, 77-78) that Hutcheson's decision to include the chapter dealing with this topic in the section devoted to onerous contracts was not due (as some have argued) to a mistake made in organizing the book's contents: the same ordering is to be found in Samuel Pufendorf's *De Officio hominis et civis* (1673) and *De Jure Naturae et Gentium* (1672). Nor is it illogical, given the particular field of Hutcheson's inquiry, to argue that in passing from analysis of gratuitous contracts to that of onerous contracts one must address the issue of price. In particular, I would stress that the problem (preeminently juridical) that concerned Hutcheson was the necessity for equivalence in exchange, on which the validity of the contract depended. His solution was that "the values of what is given and received in buying and selling should still be kept equal on both sides" (*System*, 2:63), and that, therefore, for it to be possible to achieve a fair exchange the "values of goods for commerce . . . must be reduced to some common measure on both sides" (57). Thus Hutcheson addressed, and in very similar terms, the same issue, although set in a juridical context, that Smith discussed in chapter 5, book 1 of the WN [*The Wealth of Nations*]: the search for a somehow invariable measure of value. (Pesciarelli, 1999: 536)

Hutcheson's thought formed the basis of the Smith's approach to the role and character of the prudent man. This idea of creating virtues out of prudence and judgement hearkens back to the Aristotelian Hellenic virtues of *phronêsis* and *dikaïosunê*. To Smith and Hutcheson actions are to be guided by a sense of propriety and directed by a dignity. Through this, economics inherited the intellectual toolkit of natural law along with many other systems of thought developed throughout the seventeenth and eighteenth centuries.

Natural law, and the philosophy of Aquinas and Aristotle, through the intellectual inheritance of its founding authors, thus became part of the very fabric of economics. Jacques Maritain (2005) described the intellectual debt as such:

This philosophy of Aristotle and St. Thomas is in fact what a modern philosopher has termed *the natural philosophy of the human mind*, for it develops and brings to perfection what is most deeply and genuinely natural in our intellect alike in its elementary apprehension and in his native tendency towards truth.

It is also *evidential* philosophy, based on the double evidence of the data perceived by our senses and our intellectual apprehension of first principles – the philosophy of *being*, entirely supported by and modelled upon what is, and scrupulously respecting every demand of reality – the philosophy of the *intellect*, which it trusts as the faculty which attains truth, and forms a discipline which is an incomparable mental purification. And for this very reason it proves itself the *universal* philosophy in the sense that it does not reflect a nationality, class, group, temperament, or race, the ambition or melancholy of an individual or any practical need, but it the expression and product of reason, which is everywhere the same; and in this sense also, that it is capable of leading the finest intellects to the most sublime knowledge and the most difficult attainment, yet without once betraying those vital convictions, instinctively acquired by ever sane mind, which compose the domain, wide as humanity, of common sense. It can therefore claim to be abiding and permanent (*philosophia perennis*) in the sense that before Aristotle and St. Thomas had given it scientific formulation as a systematic philosophy, it existed from the dawn of humanity in germ and in pre-philosophic state, as an instinct of the understanding and natural knowledge of the first principles of reason and ever since its foundation as a system has remained firm and progressive, a powerful and living tradition, while all other philosophies have been born and have died in turn. And, finally, it stands out as being, beyond comparison with any other, one; one because it alone bestows harmony and unity on human knowledge – both metaphysical and scientific – and one because in itself it realises a maximum of consistency in a maximum of complexity, and neglect of the least of its principles involves the most unexpected consequences, distorting our understanding of reality in innumerable directions.

These are a few of the external signs which witness to its truth, even before we have studied it for ourselves and discovered by personal proof its intrinsic certitude and rational necessity. [Original Emphasis] (Maritain, 2005: 54-55)

The illusion and attraction of the natural system

The naturalist systems that took their origins either from a desire to emulate the medical observations of Harvey and or from the experimental methods of Newton had at their very core the idea that *ex nihilo* there existed a market based on fundamental principles. (Harcourt, 2011) There was a theoretical attraction to this approach which removed economics from the “dirtiness” of everyday life. The relegation of the merchant authors and active commercial practitioners to second class intellectuals in the area of economics and finance by Smith and later 19th century authors (Bagehot (1873) being a rare example of an author equally regarded on Threadneedle Street and in the halls of academia) cut economics off from a more diversified intellectual milieu.

Harcourt (2011) does excellent work in illustrating, using the Collège de France lectures of Michel Foucault on the *police des grains*, that economic system and in particular markets were not perfectly natural entities but human artifices built by culture, history, law and most importantly the concept of regulated human behaviour. The concepts of the natural system, originally a byproduct of the school of Physiocrats based around Quesnay, developed into new, radical and more “scientific” approaches towards the penal code and the exercise of justice in French society. Law was to take on a universality, such that it conformed with the ideas of “natural law” Natural law in this context was to correlate with the Physiocrats view of positive law, that is that the universal should reflect perfectly the particular. Under these principles the state, through the exercise of police powers, should be able to shape and modify behaviour. This understanding of the system complemented the concept of a naturally existing and free market. Man was hardwired for efficient markets and the state was hardwired for what Harcourt refers to as “legal despotism”. (Harcourt, 2011) Bentham’s understanding and articulation of political economy owes much to Smith but is also indebted to Cesare Beccaria’s *On Crimes and Punishments* (1764), which proposes that the role of the state is not economic administration but the efficient operation of the penal system.

As development economics and the experience of the transition economies has shown, the market is not *sui generis* but a product of cultural, behavioural and legal norms. The combination of such norms is not easy to replicate, even where a significant state apparatus is pre-existing, as in immediate post-USSR Russia. Economics, and as a result finance, in the pre-Smithian world was acutely aware of the delicate balance of norms and as in keeping with Foucault’s analysis of the *police des grains* the State’s major responsibility was to maintain the market system and all the associated legal, social, distributive, behavioural and justice related matters attached to this social superstructure. Post-Smithian economics began to chip away at that notion with a combination of methodology and rhetoric.

Soros (2003, 2009, 2012) highlights the intellectual *cul de sac* where economics and was trapped at the height of the Global Financial Crisis. Bookstaber (2008) sees the methodology of finance in the form of its faith in efficient markets and the Black-Scholes

equation as seeding a classic form of intellectual hubris. This hubris facilitated greater and greater crises but little reflection. It is the view of Posner (2009) that the failure of capitalism is to be found in this initial rejection of the role of the state and the utilitarian approach to police powers, which opened the financial and regulatory system up to a series of eventual cascading and catastrophic failures. The market, seen as an immovable constant, efficient and engaged with by disinterested rational agents and operating according to global and constant laws and subject only to the police powers of the state became the *reductio ad absurdum* of economics and finance. By mercilessly stripping away the human, the disciplines made themselves irrelevant. This lack of relevance was the reason why merchants and bankers had begun to write about commercial activity in the 17th century, out of frustration with an increasingly myopic, introverted and irrelevant scholastic tradition.

Conclusion

Behavioural approaches to economics and finance are a refreshing turn towards the road home for the discipline. While psychology still grapples with its own methodological demons, it is clear that this approach to finance and economics allows for the greater depth and openness to methods and disciplines than the road on which Adam Smith launched economics in 1776. Ultimately Smith did not intend economics to become so myopic and chauvinistic. The desire for credibility in many ways undermined the discipline's potential to reach a more collegiate approach to incorporating the observations of financial and mercantile practitioners with the knowledge of the rest of the academy. Keynes reopened the discussion with the past. He felt that economics had lost its way and that the events of the Great Depression only highlighted the intellectual failures of his discipline. Finance at first attempted a different approach, but the Rational Expectations Revolution of the 1970s drew the disciplines closer but towards a common intellectual impasse. As scholars have explored the history of our discipline they have found many roads that were not taken over the past two centuries. Perhaps with a greater understanding of our intellectual genome and a more profound reverence for the limits of our discipline we can recapture the human and so fulfil the objectives of our subject.

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