

Why teach Aristotle in a Business School?

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46th Annual UK History of Economic Thought Conference,
September 3-5, 2014.

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Abstract.

This paper is an exposition of the merits of economic pluralism, not only for economists but also within Business School disciplines in general. It endeavours to show that Aristotle's notions on causation are not only explanatory for cyclical developments within Economics, but, as a general methodological approach, justify broad pluralist engagement with contending theoretical perspectives. Thereby an understanding of Aristotle's Four Causes emerges as an employability skill that has problem solving implications that should be academically promoted.

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Introduction

Economists have long concerned themselves with the causes of economic prosperity and wealth. We have only to look at the full title of Adam Smith's *Wealth of Nations* to see that from its modern inception Economics was thus preoccupied. What may not be so widely perceived, however, is that an understanding of the various shifts in Economics' dominant paradigms can be achieved by reference to a refocusing of Economists' views within an Aristotelian causality framework.

Thus, in our first section we will discuss such a framework in the context of theoretical paradigm shifts within the development of economic thought. Hence, we will first provide our general exposition of Aristotle's Causality position. This will provide an outline of the four different forms of causes necessary to such a framework. This framework will then be used to illustrate how paradigm shifts within the history of economic thought could be better understood.

Then, in our second part, we will relate this framework within a modern treatment of economic and business issues. We will attempt to expand the application of this framework to problem solving in general, and particularly within the business environment.

We will conclude with a discussion of how students can be introduced to this apparent archaic concept. Thus, we intend to show not only that they would benefit from being cognisant of the framework but, equally important, why it will be of use to them. We end with some guidance on how students can promote this framework and the pluralist approach as an employability gain.

Part One – The Framework and Paradigm Shifts

Aristotelian Causality Framework

Such a framework would contain Aristotle's four main causes as described in his *Metaphysics* (350 bc):

"Cause" means: (a) in one sense, that as the result of whose presence something comes into being — e.g. the bronze of a statue and the silver of a cup, and the classes which contain these; (b) in another sense, the **form** or pattern; that is, the essential formula and the classes which contain it — e.g. the ratio 2:1 and number in general is the cause of the octave —and the parts of the formula. (c) The source of the first beginning of change or rest; e.g. the man who plans is a cause, and the father is the cause of the child, and in general that which produces is the cause of that which is produced, and that which changes of that which is changed. (d) The same as "end"; i.e. the final cause; e.g., as the "end" of walking is health. For why does a man

walk? "To be healthy," we say, and by saying this, we consider that we have supplied the cause. (Aristotle, *Met.* 5, 1013a)

Although generally famed for these four causes Aristotle also provided a fifth that is often omitted, perhaps for its indirectness in comparison to the initial four, but is nonetheless worth our consideration and will be returned to subsequently.

Following Aristotle's own remark, we might conceive that looking at the causes of an issue is a good place to start investigating the question as "all causes are 'beginnings'." (ibid) Thus, an economist's exposition of an Aristotelian causality framework would do well to relate these types of causation to the four major phases in the development of Economic thought.

- **Material Cause:-** That from which something is made. Physical well-being comes from physical wealth made from physical (i.e. natural) sources. Thus for the Physiocrats the earth was the sole cause of wealth.
- **Formal Cause:-** That which is the form or essence. Hence Mercantilists were concerned with wealth evident as gold or absolute riches as the Formal Cause of well-being.
- **Efficient Cause:-** That which actually produces. Thereby, as wealth is made by Man we inevitably come to a Labour Theory of Value and the initial thrust at least of Classical Political Economy, with Smith and Ricardo.
- **Final Causes:-** That purpose for which a commodity or service is produced. Here concerns with why wealth is created, and what motivates man, come to the fore, as evident in Neo-classical economics that looks at the *Final Cause* with individualistic subjective value and the subsequent marginalism.

The use of such a framework is not itself novel and can be seen partially applied by Jeremy Bentham's reference to Aristotelian causality within his *Manual of Political Economy* (1843).

The causes of wealth, or say rather the matter of wealth, are –

1. Final – well-being.
2. Material – matter considered in respect to its possessing, or being capable of possessing *value* – viz. subservency to *well-being*, the *final cause*.
3. Efficient – viz. motion. (Bentham, 1843, III, p.36)

However, its application to understanding those apparent revolutions in the history of economic thought can provide some additional insights not only to those changes but also to why such paradigm shifts occurred in their seemingly abrupt manner.

Thereby it may prove expedient to investigate these causal categories and their relationships to economic theoretical phases a little further.

Material Causes

Undoubtedly, the primary causes of wealth or well-being are the physical necessities such as food that are consumed in the maintenance of life. Without those basic consumables, there could be no life and thus nothing to consider. The source of those physical commodities is the land from which food is grown or otherwise harvested.

By land, it must be remembered that economists have generally had a more extended understanding of the term than might otherwise be conceived. Land includes all non-produced means of production such as landed property, the seas, the weather, and the physical laws of reality. As Marshall expressed it:

The term "land" has been extended by economists so as to include the permanent sources of these utilities; whether they are found in land, as the term is commonly used, or in seas and rivers, in sunshine and rain, in winds and waterfalls. (Marshall, 1938, p.144)

The early economic concerns of feudalism were targeted towards the acquisition of those consumables and the resources from which they were generated i.e. land. In this sense, it is undeniable that without land we could not produce our food and that land must thereby be the material cause of subsistence, and by extension wealth. When the predominant interest remained with the physical production of basic resources such as food, it was inevitable that the concerns of those charged with, or those who took upon themselves, understanding economic management, concentrated on the material causes of well-being.

With economic progress attention moved away from purely physical needs towards more pressing requirements. Eventually trade enabled well-being to be distanced from direct access to the soil. Those issues that facilitated trade's increasing importance, to such a degree that material means of wealth creation were superseded by the forms with which wealth was presented via trade.

Material causes resurrected themselves briefly in the 18th century with the French Physiocratic School, although their concerns can also be recognised in topics raised within environmentalism, and some of the scarcity issues we will visit in our latter discussion of Neo-classical economics.

Formal Causes

As Locke recognised, in his *The Two Treatises of Civil Government* (1689), once money became a store of wealth, then the whole fabric of society changed (Locke, 1689, II, §36). The maintenance of well-being subsequently became linked to the control of moneyed wealth rather than simple control of the soil. A trading nation becomes imbued with wealth generating capacity in excess of its otherwise limited land resources (as could be seen with the Dutch and Venetian trading powers). When the prime concerns of a society encompassed the control of its trade and money, then it would be no surprise that its economists turned their attention to Mercantilist ideas.

Many had explained the limitations of the Mercantilist position, such as James Mill in *Commerce Defended* (1808). However, unlike Physiocratic ideals, concerns with the formal cause have had guises other than that Mercantilism set aside by Adam Smith in his *Wealth of Nations*.

Marxists' concerns with the vital form underlying capitalism can be related to formal causes in the appearance of Value-Form and the Commodity-Form.

John Maynard Keynes's affinity with Mercantilism (within chapter 23, *Notes on Mercantilism, The Usury Laws, Stamped Money and Theories of Under-Consumption*) should not be surprising given his concerns with formal causes elsewhere within his *General Theory* (1936).

One could also relate the recent financial crisis to institutional over-concentration on credit creation as evidence of a blinkered pursuit of the formal cause of wealth to the exclusion of its material, efficient and final causes. One might even therein allude to *Institutional Money Illusion*.

Efficient Causes

Aristotle's explanation of the efficient cause, from an economic perspective, centred on the phrase "in general that which produces is the cause of that which is produced". When discussing the various causes of a statue Aristotle, having initially noted the bronze and the statuary, remarked:

However, they are not causes in the same way, but the one as material and the other as the source of motion. (Aristotle, *Met.* 5, 1013b)

This draws attention to the efficient cause as motion and thereby the Classical economists' positioning of production with motion, and thereby Labour and human action. Although the term Human Action has become associated with the Misesian form of Austrian Economics subsequent to von Mises' *Human Action, a Treatise on Economics* (1949), an earlier use for economics can be seen for example, in William Hazlitt's *Essays on the Principles of Human Action* (1805).

An early exposition of the alignment between labour and movement can be found in the work of the Comte, Antoine Louis Claude, Destutt de Tracy (1754-1836)

All the operations of nature and art resolve into transmutations, into changes of form and of place. ... What then do we do by our labour, by our action on all the bodies which surround us? Never any thing, but operate in these beings changes of form or of place, which render them proper to our use, which make them useful to the satisfaction of our wants. This is what we should understand by – to produce: It is to give things a utility which they had not. (Tracy, 1817, p.19-20)

Similar declarations can, of course, be found in many later economists such as James Mill (1821), Torrens (1821), McCulloch (1824), and Hodgskin (1827). Thus the animate nature of human labour, as the instigator of productive movement, became conceived of as the sole or efficient cause, of wealth.

Since those heady days of the early 19th century numerous theories developed that placed labour as the core feature of economic production. The Labour Theory of Value (LTV) thus became the perceived central plank of Classical Political Economy and its over-riding concern was thereby with the efficient cause of wealth - Labour. There were, of course, ideas other than this famed LTV, such as the Value Theory of Labour and the Labour Theory of Property, abounding within political economy.

The *Wealth of Nations* had begun with the recognition that “The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes” (Smith, 1776, p.10). Thus the economic problem that Smith addressed and which was to hold economists’ attention for the next hundred years (since Malthus’ *Essay on the Principle of Population* (1798) had subsequently ruled out, for many, the acceptability of increasing the labour force as an option for increasing wealth) was how to increase labour’s productivity. With this in mind, it is little wonder that the early Classical Political Economists addressed their discipline to productivity as the major economic problem of the time.

This concentration on the efficient causal influence of labour, within the grasp of the last major economist of the Classical period, John Stuart Mill, lead him to what was for many an unsavoury conclusion:

I agree, then, with the Socialist writers in their conception of the form which industrial operations tend to assume in the advance of improvement; and I entirely share their opinion that the time is ripe for commencing this transformation, and that it should by all just and effectual means be aided and encouraged. (Mill, III, p.794)

This acceptance by the epitome of Classical Economics combined with the rise of socialist parties, together with the emerging work and agitation of communists, such as Karl Marx, was probably not unconnected with what has become known as the Marginalist Revolution of the early 1870.s.

Marginalist concepts, especially the notion of diminishing marginal utility, were not unheard of before this revolution took hold. An example can be seen with the early socialist William Thompson: “Successive portions of wealth diminish in their power of producing happiness when added to the same individual’s share” (Thompson, 1824, p.91).

Indeed Werner Stark suggested that even Adam Smith raised them in the *Wealth of Nations* with his discussion the differential principle in connection with the price of silver (Stark, 1944, p.38).

In his review of Richard Jennings' *Natural Elements of Political Economy* (1855) for *The Economist*, Thomas Hodgskin had commented on Jennings' assertion that value was a subjective judgement, with surprise that as such a claim needed to be emphasised:

It never has been doubted that value is a mental conception, the result of the desires, labours, and interests of individuals, the consequence of mutual and contradicting haggling; (Hodgskin, 23rd June 1855, p.681)

Indeed John Rooke had concentrated rather on what would nowadays be seen as the marginalist implications of Ricardo's work:

Though this able and distinguished writer has stated his views in a logical and well defined manner, yet, in respect to what regulates the value of corn, they come no nearer the truth, than it must be the last and finite portion of that commodity added to the general stock, which, *in some way or other*, regulates the value of farm produce. (Rooke, 3rd April 1820, p.152)

We have elsewhere, (Day, 2009) gone into greater depth to illustrate the point that many Classical Economists held to what nowadays is recognised as subjectivist and marginalist positions and that the Marginalist Revolution was simply the coming to the fore of ideas that had circulated throughout the previous years of most of the 19th century.

Essentially, what changed was the refocusing away from labour and its productivity, as the efficient cause of wealth towards a concentration on individualist subjectivist valuation as the final cause of wealth. The other great arm of the Neo-classical revolution was the adoption of ordinal utility and the abandonment of cardinal utility.

Although Classical Economics can be seen to have been initiated with Adam Smith's *Wealth of Nations*, this work is pre-Utilitarian, whereas most of the subsequent Classical Economists from James Mill through to Karl Mark were Utilitarian. Very few economists, apart perhaps from Thomas Hodgskin, persisted with Smithian pre-Utilitarian Economics in the 19th Century.

Smith was thus an Enlightenment Economist, whereas Neo-classical Economics owes more to the anti-Enlightenment political theories that began with Burke's response to the French Revolution of the late 18th Century and reactions to the revolutionary turmoil of the 19th Century.

Final Causes

As already noted, modern economics in its orthodox guise of Neo-classicalism, and some of its heterodox manifestations such as Austrian Economics, is predominately concerned with human motives towards wealth creation. The rise of consumerism, marketing, and other interests within a modern business school, can be related to

the Final Cause. The consumer's needs are paramount, as seen with such terms as Consumer Sovereignty. Little else seems to matter except those activities and systems that support this finality.

Productivity and technology are subjugated towards the customer as the consumer. Whilst many may bemoan such a shift for many reasons, we might seek understanding for this shift using our Aristotelian framework. Apart from the political ramifications that undoubtedly resonated after Mill's alignment with socialism, another issue that came to the fore was scarcity.

Scarcity

Many modern definitions of Economics revolve around the issue of scarcity. This was not the case for Classical Economists, perhaps with the exception of Malthus. This was evident in Mill's review of Quincey's *Logic of Political Economy* for the *Westminster Review* in June 1845

Have not all political economists distinguished between articles which can be multiplied to an indefinite extent by labour, and articles naturally or artificially limited to a quantity short of the demand; and have they not all, from Ricardo downwards, affirmed that in the former, and more common case, the value conforms on an average to the cost of production, while in the latter there are no limits to the value except the necessities or desires of the purchaser? (Mill, IV, p.398)

The "more common case" was that scarcity was itself a minority issue and that the majority of goods could be reproduced when sufficient labour was applied. Indeed Ricardo had been dismissive of goods subject to scarcity:

By far the greatest part of those goods which are the objects of desire, are procured by labour; and they may be multiplied, not in one country alone, but in many, almost without any assignable limit, if we are disposed to bestow the labour necessary to obtain them. (Ricardo, I, p.12)

Thus, he restricted his economics to those non-scarce goods:-

In speaking then of commodities, of their exchangeable value, and of the laws which regulate their relative prices, we mean always such commodities only as can be increased in quantity by the exertion of human industry, and on which the production of which competition operates without restraint. (ibid)

By contrast, modern economics usually starts with the presumption of scarcity. A review of first year microeconomic textbooks reiterates this position :-

Economics is about *scarcity*. (Estrin, Laidler, & Dietrich, 2008, p.1)

The central economic problem is the problem of scarcity. (Sloman & Wride, 2009, p.4)

Thus, scarcity is the mother of economics. (Perloff, 2009, p.1)

This is the orthodox creed of Neo-classical Economics that is illustrative of its antagonism to Classical Political Economy. Without scarcity the economic problem is not dealing with limited resources and individuals' needs but production and productivity – thus the efficient causes of goods. With scarcity, allocative and distributive problems, together with concerns regarding needs and subjective valuations, dominate.

Modern preoccupations with sustainability and the environment reflect a scarcity agenda. When, in 1824, Thomas Hodgskin wrote about global warming causing the seas to rise, then, as today, the result of man's industrialisation, it was as a chemist's rather than an economist's concern.

The more productive humanity has become, with more goods produced, it could be viewed as somewhat ironic that the problem of the scarcity of those multitudinous goods has become the major economic problem.

Such irony was not lost on Thomas Hodgskin who, following Smith, assuming that prices had an inevitable tendency to fall, set up *The Economist's* commodity price index to prove his point that real prices, or what Adam Smith had called Natural Prices fell in the long run. An effective truism if Smith's Natural Prices are understood as the inverse of productivity and one accepts that productivity is always increasing.

In February 2005 *The Economist* reported that Hodgskin's index showed that prices amounted to only 30% of their 1845 level. On 7th January 2012 the BBC website reported that in real terms "Groceries today cost one-thirteenth of what they did 150 years ago" (<http://www.bbc.co.uk/news/business-16450526>). If prices have constantly fallen in real terms, Hodgskin argued, it is hard to believe that scarcity is an issue that economists' should be overly concerned with.

Equality

In Werner Stark's excellent work *The History of Economics in its Relation to Social Development* (1944) the point was made that between the birth of Classical Political Economy and the onset of Neo-Classicalism immense social changes had occurred following the progression of Capitalism. In Smith's days, the labourer and the means of production were not separated. The labourer of the *Wealth of Nations* had relatively free access to the tools of their trade. By the 1860.s this had dramatically changed.

The workman of the eighteenth century was a free master of his own tools, the worker of the nineteenth century the unfree servant of another man's factory. (Stark, 1944, p.27)

Classical Political Economy was based on the equality, as illustrated in Adam Smith declaration:

The difference of natural talents in different men is, in reality, much less than we are aware of; and the very different genius which appears to distinguish men of different professions, when grown up to maturity, is not upon many occasions so much the cause, as the effect of the division of labour. The difference between the most dissimilar characters, between a philosopher and a common street porter, for example, seems to arise not so much from nature, as from habit, custom, and education. (Smith, *WN*, I.2.4)

By late 19th century such a proposition did not sit well with the prevailing social conditions or society's upper echelons' aspirations. Neo-classical economics has to deal with obvious inequality, and tends to do so either by focusing solely on the isolated (asocial) individual and the use of notions of marginal productivity that supposedly provides all with their just deserts. Most Classical economists used Utilitarianism to justify social distribution as maximising social welfare, whereas the Neo-classical relies upon Pareto Efficiency to leave all well alone.

Intermediate Causes

(e) All those means towards the end which arise at the instigation of something else, as, e.g. fat-reducing, purging, drugs and instruments are causes of health; for they all have the end as their object, although they differ from each other as being some instruments, others actions. (Aristotle, *Met.* 5, 1013a)

Aristotle's fifth cause is more often than not left out of discussions of causation due to its subsidiary position to the Final cause. Nevertheless it is something we can use to describe matters in the real business and economic world.

By way of example, in the teaching of Financial Institutions and Markets, when we turn our attention to financial innovation, analysis is usually made with reference to Intermediate causes. The recognition of regulation and technological as causes or motivation to innovation can be seen as the consideration of an Intermediate cause as the regulation that forces or enables institutions to react appropriately is put in place to meet larger objectives, such as stability. The institutional reaction to regulation is, in turn, driven by the overriding profit motive. Technological change itself is driven by higher aims. The usefulness of discussion of intermediary causality is shown by it thereby facilitating subjects such as Regulatory Dialectics and the consideration of whether innovation is supply or demand driven.

Part Two - Application

Economic Orthodoxy

Economics has long been a discipline that has suffered periodical disrepute. Now, in this time of post economic crisis and austerity, it is not surprising that yet again

economists find themselves on the defensive. For some time now the economic mainstream has assumed an air of certainty that often derided the heterodox. Its come-uppance in the financial downfall from 2007 has rendered it necessary for its mainstream practitioners to defend their activities.

One such defence is to hide behind the abstract and theoretical nature of pure economic science, thereby distancing its findings from reality and practical application. This then renders the question, in those harsher climes, as to what use is economics to employers and hence to students faced with an uncertain future seeking job security or improved prospects, particularly as a result of their increasingly expensive university education.

Another reply relies on the sanctity of the orthodoxy to insist that it is not economics' purpose to provide all that is necessary to solve everyday real-life problems. The science of economics cannot be faulted - what went wrong was simply its application or mis-directed expectations as to what could be achieved.

Yet another stance would be to reflect perhaps on what George Orwell wrote in *Nineteen eighty-four*, in that "Orthodoxy means not thinking – not needing to think. Orthodoxy is unconsciousness". If a University education is supposed to impart any ability, its prime objective should perhaps be thought.

One can view a problem and say that we have the orthodox solution and all we need do is apply that orthodox answer, but this is Orwell's unthinking use of the orthodoxy.

Economic Pluralism

Alternatively, we could conceive of a problem and analyse what forms of solution are appropriate. The orthodoxy may well be able to provide an apposite response, but we should be open to the prospect that a different viewpoint may well provide a better solution.

If the one true orthodoxy is all that is known, then consideration of alternatives is not an option. Similarly any particular heterodox perspective that insists that its position, as the single alternative, is the one true panacea is as blinkered as the orthodox.

Thus, a broad exposure to the numerous alternative standpoints and conceptualisations within economics will enable students to think in a pluralist manner to their own, and we may conceive increasingly importantly, to their prospective employers' advantage.

Not all students will be suitably numerically equipped to compete with other quantitatively gifted graduates on equal terms with regards to the niceties and rarities of abstract orthodox economic science. However, what may improve their usefulness to business and thus their employability, are pluralist perspectives, flexibility and problem solving capacities. Thus such a pragmatic pluralist position may enable us to distinguish not only ourselves, but our students.

Problem Based Learning

Accepting that there are practical reasons for teaching Aristotlean Causality within Economics and Business Schools in general, we are then faced with the questions as to how this can be delivered and how our students can use this to their advantage.

Adoption of Problem Based Learning methods enables Aristotlean causation to be put into context. For Economics Smith's original problem – what are the causes of wealth? – is an obvious starting point, particularly illustrated by changing paradigms in the discipline. This can then be developed into case studies of particular economic phenomena and issues.

Using the examples presented in the first part of this paper we should be able to engage our students with the benefits of pluralistic analysis. We can illustrate why apparently archaic concepts, such as Aristotelian exploration of causality or Classical Economics, can still today, be of value.

For example, an enquiry into the causes of the Credit Crisis can investigate the problem from perspectives that investigate all four causes (Formal, Material, Efficient and Final). In the complications of reality one may well find that all four causal explanations provide useful insights that encourage the inquisitor to discuss, evaluate and compare four different, perhaps even conflicting, reasons for an event.

Within a business environment the pursuit of profits or efficiency may well be of more import. Whilst Economics may have a relatively retrospective perspective, enquiring as to why things have happened, Business Schools will be more forwarding looking, considering how to making events come to pass. Nevertheless, as Alfred Marshall argued, these two standpoints can be viewed as equivalents :-

the explanation of the past and the prediction of the future are not different operations, but the same worked in opposite directions, the one is from effect to cause, the other from cause to effect." (Marshall, 1938, p.773)

As Marshall seems to have recognised, causes are the crucial issue. Hence, a businessperson needs to be cognisant of all pertinent causes for their end in view.

There is a common confusion of the order of events for causation. The amber light does not cause the traffic light to turn red. The fact that swallows always fly south two weeks before swifts do, does not mean that swallows flying south is the cause of swifts doing so. The swallows' event may well be an excellent predictive and thus practical tool but is most definitely not causation.

Statistical correlation does not represent causation. All that it does is indicate patterns. The fact that X tends to happen once Y has occurred N number of times does not mean that that Y causes X.

Indeed what is often called common sense equates to the practical sequencing of events unconcerned with genuine causation. It may well be more practically useful, than truly understanding real causes, but the complete negation of causes for repetitive patterns is incomplete understanding.

By illustrating how Aristotle's framework can be applied to understanding historical developments students can come to appreciate why the discipline of economics has assumed its present nature.

Moreover, students can be set up to solve problems and investigate scenarios, having been equipped with an understanding of Aristotle's Four Causes. They can attempt to identify the various causes and also recognise how shifts in causality focusing affect situations and solutions.

Awareness of the potential application of the framework as a method to acquire real-life comprehension of situations, motivations and events is thus not only a boon to personal development but also to would-be employability.

Students need to be aware of the rewards that causal hermeneutics can provide and understand that these may lead to commercial advantages being accrued. They can then differentiate themselves as being thus versed against those not so educated, and thereby advantage themselves.

What Economics and wider Business related disciplines need is a pluralistic Economics that may well be predictive but more importantly is also explanatory, narrative, and talks to its practitioners – as it were, an Economics Parlante.

Concluding Remarks

Hopefully we have illustrated the potential value of teaching Economics in such a way as to expose our students to the plurality within the subject. We have used the example of Aristotle's ideas on causality as a means to show that there are contending perspectives that one should be open to when investigating many situations and problems. We do not claim that the criticisms of the economic orthodoxy herein are comprehensive or conclusive; we have only tried to show that there are alternatives.

We have also attempted to illustrate that a pluralistic attitude may provide commercial and thereby employability advantages to those willing to be more expansive and open to innovative approaches. This being possibly the case, the encumbrance upon us is to ensure that students are at least aware of such possibilities.

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