Consumers and Demand (Provisional Title)

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1 Introduction

The theory of the consumer, and of demand, lies at the heart of mainstream economics. Yet, as shown in section 2, its substantive content is extraordinarily limited in and of itself and in relation to the demands of the subject matter that it putatively addresses, and it has been like this for a very long time. Section 3 seeks to explain why consumer theory got to be way it is in terms of the problems that it set itself and how it went about solving them, laying out the basic content of the theory. This leads in Section 4 to a short discussion of the limitations of the theory on its own terms – how can such a reduced theory for the consumer and the consumed be projected into an understanding of aggregate consumption across the whole economy and across all goods. It cannot except under very special assumptions. This is followed in Section 5 by an account of how and why consumer theory, despite its narrowness and deficiencies even on its own terms, has prodigiously expanded its scope of application both within economics and across other social sciences. Section 6 offers a broad sketch of an alternative approach to consumer theory, one that draws upon political economy that is necessarily interdisciplinary. The final section discusses some of the wider implications of developments in and around consumer theory for the nature and prospects of economics as a discipline.

2 The Reduced Consumer

Putting aside a few technical developments, the consumer theory of today of orthodox, mainstream neoclassical economics would be readily recognised and understood by the marginalist economists of the 1870s. Indeed, many of the concepts now used were put forward and popularised by Alfred Marshall in his Principles of Economics, first published in 1891 and the main economics textbook for the next fifty years, and running to eight editions. So, when students of the twenty-first century learn of marginal utility and how relative marginal utilities should and would be equated to relative prices, they have a long tradition to support them. And, more advanced treatments at the highest levels of the discipline tend to be just that and no more. To go from school student to Nobel prize-winner in consumer theory, you would need to be a little more sophisticated technically but you would not need to be more conceptually advanced. In this light, it is hardly surprising that there have been no Nobel Prize-winners in Economics for consumer theory as such, for major advances in this field have been notable for their absence. Significantly, those Nobel Prizes that have been awarded with relevance for consumer behaviour have tended to question the legitimacy of the orthodoxy, usually nibbling at its margins rather than seeking major reconstruction, as with behavioural economics. This seems to be the only way to say something new, or at least different.

The unshifting and pervasive presence of neoclassical consumer theory is taken by its proponents to be indicative of its strength and veracity. It has become an unquestioned analytical commonsense and common wisdom within the discipline. How do we treat the consumer? The answer is as an individual with a utility function (or, more generally, a set of preferences) that is to be maximised subject to constraints (prevailing prices and correspondingly available income). Yet, as will be shown below, the model of the consumer and of consumer behaviour is extraordinarily weak by reference to its lack of realism and its narrowness of scope in conceptualising the consumer, the consumed and consumption.

The latter follows from the way in which the model (of the) consumer is constructed, being derived purely and simply from the utility function $u^i(x_1, x_2, x_3, \ldots x_n)$ for the *i*th consumer and for the goods, $x_1, x_2, x_3, \ldots x_n$. A number of points are immediately striking, not least that u^i is taken as exogenous, as given. How did individuals come to get the preferences that they have? For how long do they remain fixed? What would make them change? In the first instance at least, these issues are simply set aside. This gives rise to a paradox in how the individual (consumer) is constructed. For the consumer's actions are purely subjective, entirely personal and idiosyncratic, and given and fixed without reference to external (or internal) influence. But, despite then relying exclusively upon the consumer's subjectivity (so much so that marginalism is denoted as a subjective theory of value), that subjectivity is reduced to almost nothing in its substantive content. For the only thing that the subjective individual is permitted to do is to maximise a given utility function like an automaton. In short, the emphasis is upon individual subjectivity but it is a predetermined and heavily reduced subjectivity.

This lack of genuine subjectivity is reflected in four aspects. First, as is already apparent, is in the narrowness of motivation and capabilities underpinning the consumer – utility maximisation takes precedence over everything else to the extent of their total exclusion. But, as is well known from other disciplines, from psychology, through marketing, to neuron-science, consumer behaviour is motivated and prompted by many different factors, whether conscious or not, and cannot be reduced to the hedonistic pursuit of given pleasures.

Second, more rounded individuals than the single-minded putative utility-maximiser have the capacity to be inventive around their consumption. It is not simply a matter of receiving given goods but of creating pleasure and enjoyment out of them. Of course, advertisements are deployed to this end – not simply nor primarily to inform consumers of what goods are but what they might be with a little use of the consumer's (or advertiser's) imagination. This is so much so that advertisements that do appeal to lack of imagination ("it does what it says on the tin", for example, or this is the cheapest) stand out not only as exceptional but as ironic. This all positively points to the capacity of consumers to deploy their subjectivity in defining the character of goods for themselves, and they are not necessarily innocent and compliant victims of advertisers in this respect. Consumers reflect upon and, if insisting on using the terminology, make their own utility functions through inner speculation on the meaning of goods to themselves. Otherwise, there is literally nothing to distinguish the human consumer from any other non-human consumer, animal or even machine, for the consumer is little more than a mini-factory for producing utility, see below on the affinity between producer and consumer theory. Indeed, debates about the relationship between false and real needs, the role of hidden persuaders, and whether consumer sovereignty over the economy genuinely prevails are notable for their absence from consumer theory within economics.

Third, then, this is to open up the significance of external influences on the individual's more broadly interpreted subjectivity. Consumption is based upon social factors such as emulation and distinction (much emphasised in the sociology of consumption), and upon cultures and norms more generally (much emphasised in the anthropology of consumption). At least in part, individual subjectivity is influenced by social norms or whatever.

Fourth, it is not simply the motivation and influences upon the consumer that are so narrow but also the notion of consumption itself. As is often recognised terminologically by neoclassical economics itself, consumer theory is no such thing. Rather, whatever its merits, it is demand theory alone. It merely purports to offer a quantitative analysis of how much of a good will be demanded in what is a static exercise in optimisation. The range of activities associated with the attachment of demand to consumption is overlooked, in reducing consumption to the moment of purchase alone. But the acts of purchase (from anticipation to shopping) through to use and, ultimately, disposal all form integral elements in consumption and interact with individual subjectivity and its determinants in complex and varying ways. This is readily captured in popular parlance – "a house is not a home"; "you are what you eat"; "dedicated followers of fashion"; let alone "no logo", appeal to lifestyle that eschews lifestyle by branding.

So far, emphasis has been placed on how heavily stripped down, almost to the point of non-existence, is the consumer of neoclassical theory. This is an individual torn from time, place and context, from own speculative and socially conditioned behaviour. All we need to know is a utility function from which we can determine demand for each and every good depending upon prices, income and, possibly, other constraints. But, as is already implicit, by the same token, there is an equally parsimonious treatment of the goods that make up the consumer's object of desire. Significantly, and literally, goods are denoted by symbols, x_1, x_2, x_3, … x_n. They have no distinguishing features other than their subscript index, and this is only so that they can be allocated a corresponding price. This conforms neatly with the parallel understanding of the consumer as (human) individual. For, if the latter were able genuinely to be subjective and to be subject to social influences in consumer behaviour (including but over and above demand), so consumer goods would have properties over and above what is presumably their physical characteristics, however well the latter might be defined and known to the consumer. In particular, goods would have meanings attached to them by consumers, and these meanings would depend upon social determinants.

As a result, it is hardly surprising that a, if not the, major aspect of advertising is designed not to convey information about goods but to suggest the meanings that might be attached to those goods

both to the consumer and to others who witness consumption – the consumer looking at others looking at the consumer! And this can be careful and subtle, as well as crude and bombastic – appealing to the consumer as super-normal (happy families) or as super-abnormal (as goods to endow the impossible).

The point here is not to assess whether and how such advertising works or not. Rather, the practice of advertising is indicative of a wider, arguably more important, set of considerations that influence consumption and the consumer. These are precluded by neoclassical consumer theory by virtue of its limited understanding of the individual, the social, and the corresponding nature of both the consumer and the consumed. Indeed, the presence of such factors are so pervasive from our own experience as consumers (if not as economists) that it becomes a mystery how the neoclassical theory of the consumer should take their exclusion as conventional starting point. And, it should emphasised, this exclusion is not an oversight but is built into the foundation of the theory – fixed preferences, single (utility-maximising) motivation, and individuals and goods that are treated so abstractly and generally that they are without identity and meaning, respectively. How did this, and worse as we shall see, come about?

3 How Consumer Theory Got Its Spots

During the course of the nineteenth century, the idea of economic rationality came to the fore, corresponding to the view that the spread of markets (and capitalism) had created a distinct sphere of economic activity in which self-interest would be predominantly if not exclusively pursued. Wedded with utilitarianism that had also gathered strength at the same time, this all came together through the marginalist revolution of the 1870s to distil the consumer as a utility-maximising individual pursuing own self-interest through the market. As already mentioned, not much has been added to this understanding of the consumer other than in technical detail. But, in this case, the devil has been in the detail, or at least has been inspired by it.

Indeed, focus on detail has been crucial to the growing and unquestioned acceptance of consumer theory as it is today. For from the 1870s to the 1950s, the task that the marginalists set themselves was to place its consumer theory on as secure a footing as possible. And by secure is meant the technical details as opposed to more informal presentations in terms of marginal utilities and prices. As a result, what drove consumer theory in this period was the making of assumptions and the adoption of methods and meanings in pursuit of the derivation of technical results more or less irrespective of other considerations, including realism.

In short, the goal was to obtain well-defined demand curves on the basis of utility-maximising individuals and to establish the properties of such demand curves. Some of the preconditions for this have already been highlighted. Others can now be added at a greater level of detail. First, consider the notion of utility itself. Even today, outside of economics, it is associated (as it was with utilitarianism) with general well-being however determined. But, within the economics of consumer behaviour, utility has been reduced to the simple satisfaction derived hedonistically from the consumption of goods. This is in order that the theory can become a matter or logic of choice between one available bundle of goods and another without reference to other considerations.

Second, certain technical assumptions are necessary for the utility maximisation to work satisfactorily. These include “continuity” and “convexity” of preferences in the technical jargon (and there are other requirements including transitivity of preferences). These are necessary to ensure that the more familiar indifference curves are appropriately shaped so that a budget line defines a maximum with correspondingly appropriate equality between relative marginal utilities and relative prices, Diagram 1. The presumption is, for example, that consumption of mixtures of goods is superior to concentrated consumption of a few goods. This might be justified on the grounds that variety is the spice of life but, when it comes to working with spices, this nostrum surely fails as does a non-satiation condition – that more consumption without limit always gives higher utility. The important point is that the conditions or assumptions necessary to make neoclassical consumer theory work are entirely arbitrary from the point of view of consumption itself – at one level, an empirical matter that can and will go either way. The assumptions depend upon totally unwarranted and unjustifiable generalisation from particular examples or principles. The assumptions are only made because they need to be made for the theory to work. Significantly, usually little attempt is made to justify the assumptions, with presentation devoted to elaborating the technical details and implications of the assumptions as opposed to their correspondence to consumption in practice. It has to be suspected if exactly the

opposite assumptions had been needed for the theory to work, these assumptions would have been made instead. Indeed, this is exactly and more generally what economists do in making assumptions within their deductive methodology. Assumptions are made for the convenience of the theory not in light of the object of study! You will find that real world examples used in textbooks to illustrate the principles by reference to particular goods, such as chalk and cheese, are no such thing. These specific goods are used, if at all rather than x_1 and x_2, as illustrative devices not as illustrations. We learn nothing about chalk and cheese as such, let alone the more appropriately abstract widgets.

These technical assumptions underpinning consumer theory seem outrageous until they become second nature to the practising economist. Third, though, their acceptance was also dependent upon profound shifts in the nature of economics as a discipline. On the one hand, it became detached from other disciplines, especially those dealing with consumption from other perspectives such as sociology, psychology, history and anthropology. This is associated with economics becoming reduced to a particular version of the science of the market, explaining the logic of supply and demand. On the other hand, economics experienced a shift in, and narrowing of, method. The economic rationality of the optimising individual serves as the basic building block; and the theory depends upon axiomatic deduction from assumptions about individuals that have no basis in empirical investigation.

Not surprisingly, neither the progress in establishing the technical results nor the acceptance of their significance was achieved immediately. Significantly, during the interwar period, such microeconomics, as it was to become when complemented with the corresponding theory of the firm and supply, was primarily perceived as relevant to at most one part of economic behaviour and analysis, precisely that concerned with the isolated, optimising individual. This detached it not only from other social sciences but also from other branches of economics, especially those concerned with the systemic functioning of the economy as a whole. Not surprisingly, then, the explicit distinction between microeconomics and macroeconomics first emerged in the 1930s, with the presumption that (Keynesian) macroeconomics would address the major problems of the day for which marginalist principles were at most of marginal use. In addition, other inductive traditions were strong in economics at this time, especially institutional economics (itself particularly influential in the United States) for which attention to social organisation and processes of the economy in practice took precedence over abstract deductive principles, particularly those focused on the optimising individual.

But, in the decade following the Second World War, the situation within economics as a discipline changed dramatically. First, the technical apparatus around consumer theory was essentially developed as fully as it could be. Given that a consumer has a utility function and maximises that utility subject to given prices and budget constraint, what are the consequences for the properties of the derived demand curves? Putting this issue round the other way, suppose we want to posit demand curves for theoretical purposes and/or empirical estimation, what restrictions must be placed on what form these curves take. We would expect them to be positive for example in own price (although if prices of certain goods became really high, consumers might start to supply rather than to demand them!). This is a straightforward enough question but getting hold of the answer was not so simple. As students of elementary economics know, demand for a good is not only dependent upon its own price but also potentially on the price of all other goods. As a result, demand curves may not be downward sloping in own price, as classically drawn in the diagram of supply and demand curve cross. The higher price implies lower real income overall as lesser bundles of goods can be purchased with the same money income. So it is possible that utility will be maximised for a higher price on an “inferior” good by consuming more and not less of that good despite its increase in price.

This is not difficult to understand. Suppose a consumer wishes to meet certain dietary requirements but prefers to do so, if income allows, by moving up the scale of more expensive (presumably higher quality) foods. If the price of basic foods increases, it may be necessary to consume more and not less of these to meet dietary needs. Again, as is well-known, such inferior goods have a negative income effect (other things being equal, demand decreases as income increases). If that negative income effect is sufficiently large, it can outweigh the substitution effect of consuming less of goods purely because of their increase in price, once correcting for the corresponding loss of income. If the demand for a good increases when its price increases, it is known as a Giffen good.

This is all standard stuff in demand theory, so much so that you can readily find it on Wikipedia, http://en.wikipedia.org/wiki/Inferior_good, diagram 2. It follows that there is no simple relationship between changing prices and changing patterns of demand even with the heroic

assumptions made around fixed, continuous and convex preferences. What has been achieved with consumer theory is to explore these conundrums fully and to find what properties must be satisfied for demand curves to be truly representative of the optimising behaviour of an individual. One property, for example, akin to absence of money illusion, is that demand should be homogeneous of degree zero in income and prices. In less technical terms, if we double all prices and income (or change each by the same factor), then demand should remain the same. In other words, it should make no difference to demand if we calculate our prices and incomes in pennies rather than pounds.

Further, and this was the major discovery for consumer theory, demand curves should be negative in own price and positive in the price of other goods if we adjust income when we make those price changes so that the level of utility remains the same. In technical terms, as we move round an indifference curve, we are substituting more of relatively cheaper other goods for less of the more expensive. This property is important in defining the necessary and sufficient conditions for specified demand curves to have been derived from optimising behaviour.

For completeness, this can be expressed formally for the reader who wishes and is able to follow it through. Suppose we take the standard utility function $u(x_1, ..., x_n)$. Recall that this is supposed to be underpinned by a set of preferences out of which we have derived the utility function, u( ).With prices p_i and income I, we need to maximise u( ) subject to $p_1x_1 + ... + p_nx_n = I$, the budget constraint. When we solve this problem, we get what are called the Marshallian, direct, observed or uncompensated demand curves for each of the goods, $x_i = g_i(p_1, ..., p_n, I)$. The terms direct, observed and uncompensated are all used in order to indicate that these functions, under the assumptions made, represent the demand that would be directly observed at these prices and income without compensating for any loss (or gain) of income in light of what the prices are in order to keep the level of utility constant.

We can also substitute these demand curves back into the utility function and obtain a complicated function out of the u( ) and the g_is - $u(g_1(p_1, ..., p_n, I), \dots g_i(p_1, ..., p_n, I), \dots g_n(p_1, ..., p_n, I))$. This can be simply rewritten as a function of the prices and income alone and is known as the indirect utility function $v(p_1, ..., p_n, I)$. This is the solution to our maximising problem as it tells us, given u( ), how much utility we can get when facing prices p_i and income I. v( ) is known as the indirect utility function because it is a function of prices and incomes. These do not give us utility directly, that only comes from the goods x_i, but v( ) does tell us how much utility we can get given prices and income.

It is relatively easy to show that g_i and v are all homogeneous of degree 0 in prices and income (double these and our demands remain the same as does the maximum utility that we can obtain). So, given a utility function with the right properties, we can solve our demand problem. But what about the other way around? If someone gave us some demand curves, $g_i(p_1, ..., p_n, I)$, or the indirect utility function v( ), could we work backwards and discover the utility function, u( ), from which they were derived? The answer is a <u>qualified</u> yes. For, if we start with v( )instead of u( ), we can obtain the Marshallian demand curves. This is a result of what is known as Roy's identity, stated here without proof and which shows that $g_i(p_1, ..., p_n, I) = -(\delta v/\delta p_i)/(\delta v/\delta I)$.[1] In other words, given v( ), we can get back to the g_i( ). With minor qualification, we can also go back from the g_i( ) to get the utility function u( ).[2] This means that we can effectively now go back to v( ) by using the g_i( ) and the u( ) derived from them.

What we have shown is that, with minor qualification, each of preferences, utility function, Marshallian demand functions, and indirect utility function are all equivalent to one another in terms of the information they contain. This is useful but, as it stands, it still does not tell us what properties we need to impose on the Marshallian demand functions or the indirect utility function. Because of inferior good type problems, we cannot make the demand functions negative in own price, for example. But now consider what is termed the dual problem of minimising the income that you need in order to obtain a given level of utility u( ). This is the same problem as before but the other way round. We are trying to get to a given indifference curve by using the least amount of income as opposed to getting to the highest indifference curve by using a given amount of income, diagram 1 again. Graphically, both problems are represented by tangency between indifference curve and budget line, whichever one is being moved about as opposed to being fixed. This means they are essentially the same problem which is why they are given the name of primal and dual, and there is a fixed correspondence between the solutions involved.

For the dual, we minimise $I = p_1x_1 + ... + p_nx_n$ subject to $u(x_1, ..., x_n) = u$, i.e. the problem is to find the consumption bundle for given prices that gives the minimum cost of achieving a given level of utility (rather than maximising utility for a given amount to spend). When we solve this problem we get what are termed the Hicksian, indirect, unobserved, compensated (the opposite or dual of the Marshallian) demand curves. They are indirect in the sense that consumers have no idea as such of a level of utility that they are seeking to realise. By the same token, they are unobserved as consumers go about making expenditures on the basis of income and prices, not on unobserved utility targets. And they are compensated in the sense that, whatever happens to prices, we are always giving the consumer enough income to get to a pre-assigned level of utility.

Represent Hicksian demand curves by $h_i(p_1, ..., p_n, u)$. If we add up $p_1h_1 + \ldots + p_i h_i \ldots + p_n h_n$, then we get the solution to our problem and the corresponding expenditure or cost function $I = I(p_1, ..., p_n, u)$. This is the minimum cost of getting given utility u given prices p_i. Suppose, though, we are offered the expenditure function I( ) as starting point. Can we get back to the Hicksian demand functions and the underlying utility function. Once again, the answer is yes. By a result known as Shepard's Lemma,[3] it is possible to get back to the Hicksian demand functions from the expenditure function, since $\delta I(p_1, ..., p_n, u)/\delta p_i = h_i(p_1, ..., p_n, u)$. It is also possible to retrieve the utility function from the Hicksian demand functions.[4] In addition, the functions I( ) and v( ) are essentially the same as one another. They are inverses – one taking income as the dependent variable, the other taking utility as the dependent variable. So writing $I = I(p_1, ..., p_n, u)$ is the same thing as writing $u = v(p_1, ..., p_n, I)$. It is a bit of a mouthful but this can be put in words. What utility could we get with income I at given prices, if I is the minimum amount of income that we need to get that level of utility, u? The answer is u. And, what income do we need to get utility u at given prices, p_i, if u is the utility we get with income I at those prices? The answer is I. In symbols, the following are identities (they must be true), respectively, $u = v(p_1, ..., p_n, I(p_1, ..., p_n, u))$ and $I = I(p_1, ..., p_n, v(p_1, ..., p_n, I))$.

This means that there is a strict correspondence between the Marshallian indirect utility function and the Hicksian expenditure function. One is equivalent to the other and we can go from one to the other by rearranging what is set equal to what, u as function of prices and income, or income as a function of price and utility. But, as we have already demonstrated that the different steps along the Marshallian system are all equivalent to one another, from preferences to indirect utility function and back again, subject to monotonicity of the utility function, so the same applies across these and all the steps in the Hicksian dual demand system.

This is all illustrated in diagram 3, and it is a satisfying and elegant representation of the correspondence between different ways of approaching the consumer. But it goes much further than this, once we explore the properties of the Hicksian demand function. For, it is now possible to tease out exactly what are the required properties of the demand system (one that is obtained from an optimising consumer). There are some obvious and readily identifiable properties. For example, the Hicksian demand functions (and expenditure function) should be homogeneous of degree one in prices – if we double all prices, we will buy exactly as we bought before, with relative marginal utilities equalling relative marginal prices, but we will need twice the income to do it. As already indicated, though, the main problem is that associated with inferior goods and with the interaction between substitution and, potentially perverse outweighing, income effects. The beauty of the Hicksian system though is that it eliminates the income effect by compensating for it with constant utility. This means that its properties are well-defined (by analogy with moving round an indifference curve in response to relative price changes in the budget line. Doing this always means consuming less of goods with higher price and more of goods with the same prices, the pure substitution effect that the Hicksian system is designed to capture. Move the budget line around the indifference curve in diagram 1.

In formal terms, this can all be derived from the mathematical properties of the Hicksian expenditure function, I( ). We already know, from Shepard's lemma, that $h_i = \delta I/\delta p_i$. Further, then, because of the pure substitution effect, $\delta h_i/\delta p_j$ should be positive unless i=j in which case it is negative (own price effect as demand goes down with increased price in absence of income effect). In addition, because the order of differentiation does not make any difference to outcome, $\delta^2 I/\delta p_i\, \delta p_j = \delta h_j/\delta p_i = \delta h_i/\delta p_j = \delta^2 I/\delta p_j\, \delta p_i$ and these are all positive unless i=j for which they are negative. In other words, substituting along an indifference curve from one good i to another good j is equal and opposite to going the other way around, and is positive (in absence of income effect as we are not hopping between indifference curves).

Now it turns out that, alongside homogeneity, etc, already discussed, these properties of the Hicksian demand functions are just necessary and sufficient for them to have been derived from the optimising behaviour of the individual.[5] This means that we can work with the Hicksian demand system for theoretical problems, and use the mathematical properties of the system for the purposes of comparative statics (the properties of a new equilibrium in case of a change in the tax system, for example). We can also take a proposed Marshallian demand system, transform it into its Hicksian counterpart and check that it satisfies the necessary and sufficient conditions for being derived from optimising behaviour. In that way, when we empirically estimate the Marshallian system from observed data, we do know that we are dealing with properly constituted demand curves. Alternatively, we can take a Hicksian demand system and translate it into a Marshallian system for estimation.

4 Consumer Theory Hoist on Its Own Petard

In short, on its own terms, this consumer theory is satisfyingly complete – allowing it to be both well-founded in terms of squeezing out all there is from the assumption of optimising behaviour. This, in turn, provides for theoretical and empirical work to be carried out with corresponding implications for policy. It is a remarkable achievement and can hardly be improved upon – once accepting its severe limitations. Possibly the reader, like the pioneering theorists themselves, has been carried along by the technical imperatives and the corresponding chase to pin down the properties of demand curves despite the problems posed by perverse income effects. But what has come out is neither more nor less than what has gone in. And, as is apparent from the presentation, the only input to this exercise is the consumer's set of given preferences and the presumption of utility maximisation, top of diagram 3.

This is obviously extremely limited in analytical content and, it should be added, application as will be demonstrated by two issues. The first concerns the notion that demand can, for a Giffen good, go up with price because of its inferior quality. But it has also been established that demand for a good can go up with its price for entirely different reasons and for entirely different goods, those associated with luxury. This is as a result of what is called the Veblen effect, with Veblen strongly associated with the idea of conspicuous consumption. If a luxury good goes up in price, it becomes strongly associated with esteem and as a symbol of status and wealth. The same can apply as a motive for consumption irrespective of price changes as sociologists have recognised in terms of emulation and distinction as underpinning consumer behaviour (keeping up or ahead of the Joneses). So this is not just a matter of elite or luxury consumption as is also apparent from consumption choices over branded and own-label goods, with one liable but not guaranteed to offer greater consumer satisfaction simply because of its image of higher quality, something deliberately targeted by advertisements. It follows that dividing changes in demand between income and substitution effects, even for the individual consumer, is liable mistakenly to overlook both other influences on consumer behaviour associated with interdependent, not given, preferences across consumers, and motives other than utility maximisation. As is apparent from the brief discussion, to which goods these considerations might apply is likely neither to be uniform across goods, across time nor across consumers. The theory might be prepared, in empirical application, to assign what it does not explain statistically as being due to shifts in preferences. But those shifts in preferences that reinforce those associated with shifts in prices and incomes will be counted as income and substitution effects.

This all arises because of the exclusion of so many of the determinants of consumer behaviour, and the difficulty of accommodating them even if the attempt were made. Did the taste for chicken rise because of the reduction in its price or because of a shift in tastes towards chicken? A second problem is one within the theory and, to some extent, of its own making. This is how to deploy the theory of a single consumer to explore demand as a whole, the aggregation problem. Put more precisely, if we are to estimate a demand function for the economy as a whole, just drawing upon the economy's overall income and the price system, is it legitimate to use the demand system derived for an individual? In other words, can we estimate demand functions independent of the distribution of income across consumers?

Not surprisingly, the answer is no in general, and the conditions for it to be yes are extremely stringent, unrealistically so. Essentially, we want the economy as a whole to consume as it were a single individual with a given income. But if we take income from one consumer and give it to another, the pattern of demand will be different unless those two consumers have the same preferences. So we have to assume that each and every consumer has the same preferences. Even this assumption is not

enough. For, suppose it is true, but we take income from a rich person and give it to a poor person. Their patterns of consumption around their initial levels of income are liable to be very different, luxuries as opposed to necessities. So, redistributing the income from rich to poor will not leave demand unchanged but shift it from luxuries to necessities. To have an aggregate demand function as if the economy were a single individual it is necessary both that every individual has the same preferences and that those preferences remain in the same proportions at every level of income (or, once you know one indifference curve for our representative individual, you know them all). For the aggregation problem to be negotiated, it is necessary that the economy's demand be reduced to a single indifference curve! Relative prices indicate where we consume on it in relative proportions and aggregate income tells us how much we consume.

Obviously, this is entirely unacceptable but it is in part a consequence of the failure to take account of both income distribution as a factor in demand and that preferences are not independent of one another. This is recognised in empirical work in practice by estimating different demand functions for different sections of the population, by age, gender, region, class, household type, etc. With enhanced and cheapened computer power, this has become more common, even commonplace, as a consequence of the more readily available data sets at household level and the capacity to undertake sophisticated econometrics with that data. But there is a paradox here. For the theory takes preferences as given as the basis on which to construct its theory of consumer behaviour. Yet, in order to implement the theory empirically, it is explicitly accepted that certain variables are systematic sources of differences in, or identity of, preferences. Surely, the theory should investigate what these are!

5 Consumer Theory as Economics Imperialism

So far, the dynamic and imperative of consumer theory has been highlighted together with its most immediate results and consequences. A narrowly defined, but challenging, problem was eventually solved by an extraordinary reduction of the nature of how consumer theory came to be constructed, with an implosion of the scope of the analysis to so that it only included fixed preferences, over fixed goods, and subject to utility maximisation alone. To some extent, the elegance as well as the completeness of the solution offered some rationale for it to become a core component of mainstream economics. It also had the advantage of being able to be presented at different levels of complexity and sophistication – from the informal notion of equality of ratios of marginal utilities to relative prices through indifference curves, utility functions, and income and substitution effects in diagrams to the duality between Marshallian and Hicksian systems of demand.

But the place and influence of consumer theory within an evolving mainstream neoclassical economics extends beyond its immediate object of analysis. First and foremost, once complemented by producer theory, and aggregating over all economic agents, consumer theory has served as a major element in establishing general equilibrium theory as the central accomplishment of microeconomics. Married to producer theory, consumer theory offered an understanding of the workings of the economy as a whole, drawing upon the optimising behaviour of individuals whether in supply or demand. Such general equilibrium theory was essentially established in its modern form in the 1950s at much the same time that consumer theory had formally ironed out its own difficulties.

Second, this paved the way for what has been termed a formalist revolution in economics, the increasing reliance upon mathematical methods and deductive modelling as the form taken by economic theory. Whilst the use of mathematics in mainstream economics is now taken for granted, this is not just a matter of style of argument but also reflects a profound shift in the content of the economics as well. Certainly, the use of mathematics in economics is independent in principle to a large degree from its substantive content. But consumer and producer theory (and general equilibrium theory) as core topics within economics promoted the use of mathematics, and the use of mathematics returned the favour. And the formalisation was not confined to microeconomics. Keynesian macroeconomics, without relying upon such microeconomics, was also increasingly presented, however faithfully, in mathematical terms, especially with the use of the IS/LM/BP framework as the standard textbook treatment.

Third, nor did this formalist revolution take place in an intellectual, political and ideological vacuum. It was heavily associated with the rapid expansion of teaching and research in economics in the United States. The Americanisation of economics involved a significant and rapid shift of the centre of gravity for the discipline from the UK to the US. It was also associated with the

“professionalisation” of the discipline, standardised textbooks around standardised material, with the exclusion of other considerations from within economics itself (increasingly marginalised as heterodox) and from other disciplines. During the time of the formalist revolution, the Cold War and anti-communism was at its height. Those promoting Keynesianism, despite its impeccable intellectual and political origins in the mission to save capitalism from itself through prevention of crises of deficient effective (possibly consumer) demand, ran the risk of being dubbed as communists.

Thus, in the immediate post-war period, the promotion of a narrowly defined microeconomics was complemented by an increasingly formalised Keynesian macroeconomics. Interestingly, game theory came to the fore at this time but was essentially ignored by economists for its potentially damaging implications for defining economic rationality as utility maximisation. And, even though it was fiercely anti-communist and even anti-Keynesian in its neo-liberal postures, neo-Austrianism (with its emphasis on individual inventiveness and the spontaneous emergence of institutions to promote it) was also set aside as distraction from, and potentially damaging to a pure focus on economic rationality and its technical content and implications.

It is important neither to exaggerate nor to distort the intellectual and ideological thrust underpinning the formalist revolution. It certainly was not inspired by anti-communism and neo-liberalism. Yet, it was entirely compatible with these for those adopting an extreme position in hostility to state intervention and advising of the benefits of the market. This is apparent in the idea of consumer sovereignty and the fundamental theorems of welfare economics. Left to its own devices, the market serves the consumer, all of us, and no one can be made better off without someone else being made worse off. Equally, though, the formalist revolution was compatible with emphasis on market imperfections at both macro and micro levels, in light of deficiency of effective demand and the presence of externalities and monopoly. But the way in which the imperfectly working market could be conceived within economics was heavily constrained by its dependence upon the newly established core principles. This is true analytically, other than in macro, in the sense of still relying upon optimising individuals with given utility functions, etc, and with a corresponding neglect of, and lack of contact with, the approaches of the other social sciences concerned with power, conflict, institutions and so on. And it was also true ideologically given that market imperfections were to be perceived as something that could be corrected within capitalism, usually by a benevolent state.

The formalist revolution, then, had the effect of both consolidating the application of marginalist principles and confining their content in relation to the rest of economics and the other social sciences. But no sooner had this implosion done its work in this respect, in occupying a core place within the discipline, than it rapidly sought to expand its scope of application. The logic underpinning this reversal was, in a sense, impeccable. For the principle of utility maximisation had only previously been confined in practice to the explanation of <u>market</u> demand in response to prices by convention as this core principle was being investigated for its technical properties. But this principle is universal and should apply equally to all, and not just market or even economic, activity, and across time, place and context. Thus, once the core microeconomic principles been accepted, they began to be used for non-market applications.

One of the earliest such examples was public choice theory, and the corresponding idea that politics is the pursuit of self-interest through means other than the market – with the possibility of trading in policies as if a market were present. James Buchanan, for example, pioneer of Public Choice theory, and winner of Nobel Prize in Economics for it, could not have put it more simply. “The simple exchange of apples and oranges between two traders – this institutional model is the starting point for all I have done”. This would apply as much to declaration of war as to trading in fruit! Similarly, human capital theory began to treat education and the accrual of skills as if they were akin to a process of market costs foregone in gaining higher productivity and benefits realised through higher earnings. For reasons peculiar to the United States, the traditional requirement that it be taught within economics departments, economic history was also targeted as something that should come under the auspices of mainstream economic theory, leading to the emergence of the new economic history or cliometrics as it came to be known.

In short, there is the irony that neoclassical (consumer) theory was established by setting aside any number of relevant factors and approaches. But, once established, it was used to address those very factors that had been omitted in enabling it to prevail in the first place. On this basis, the microeconomic principles associated with consumer theory were used to colonise topics from other

social sciences in what has been termed economics imperialism. In the forefront of this enterprise was Gary Becker and his so-called “economic approach” to all social science. For him, any topic, from politics and human capital, to intra-household behaviour, through addiction and criminality should be treated as the result of rational utility-maximising behaviour in a context as if a perfectly working market is or could be present.

Clearly, such economics imperialism had some degree of success but it was constrained both internally and externally. Within the discipline, there remained a strong tradition in favour of Keynesianism and the idea that macro-behaviour is both systemic and not subject to reduction to individual optimisation. The absence of money, for example, in microeconomics was a significant obstacle to projecting it to explain the workings of the economy as a whole, as was the unavoidable evidence of the 1930s of the failure of the market to work as if a general equilibrium. Significantly, Becker has never made a contribution to macroeconomics. Indeed, the division of the discipline into micro and macro also supported the notion that certain aspects of overall functioning of the economy lay outside the scope of economics altogether – not least the sources of technological change and shifts in preferences, non-maximising behaviour, and the role of institutions, customs and culture more generally. Externally, there was also considerable antipathy to the economics imperialism pioneered by Becker. By virtue both of method and theory, the other social sciences were liable to be antagonistic to the reduction of social structures, agencies and processes (class, power, conflict and the state, for example) to the optimising calculation of costs and benefits attached to historically anonymous individuals.

But, following the collapse of the post-war boom, and a considerable crisis of Keynesianism in light of stagflation, monetarism and neo-liberalism gained an intellectual and ideological hegemony across the Anglo-Saxon world. This was soon accompanied by an aggressive and introspective expansion of microeconomics within the discipline of economics in the form of the New Classical Economics. This essentially argued that government could make little difference to macroeconomic performance but also that macroeconomics itself should be based on the optimising behaviour of individuals alone. The novel twist was to suggest that random shocks were the only reason why the economy was not permanently in equilibrium, and that individuals would make use of information optimally in negotiating such shocks and their consequences.

Of course, these somewhat bizarre developments within macroeconomics – narrower theory and assumptions across a wider compass to explain an increasingly dysfunctional economy – are not of immediate concern to a discussion of the microeconomics of consumption but for two important qualifications. The first is the extent to which it became increasingly legitimate within the discipline to base economic theory along the lines of the optimising individual and to extend the scope of that optimisation to include informational uncertainties. In this respect, it is important to recognise that corresponding expectations about the future took on a particularly narrow meaning – they concerned the statistical probabilities of known outcomes, higher or lower inflation for example. This focus on what is known as risk set aside the issue of uncertainty and its relevance for economic analysis, that is the role played by inventiveness and the unpredictable in influencing outcomes. This includes, for example, the older idea of expectations as used by Keynes himself, and the possibility that the economy might be subject to waves of pessimism or optimism, not necessarily attached or capable of being attached to rational calculation of odds. For him, it might mean guessing what others were guessing about movements in the stock exchange, but it might also be anticipating the future of electronic goods and their impact on the economy. As far as consumer theory is concerned, though, this reduction in the meaning of expectations to codifiable data meant a further move away from the role that might be played by individuals in creating the meaning of goods.

The second consequence of the new classical economics was to push academic opposition to it in a particular direction. The reduced approach to uncertainty as stochastic information was accepted as was the expanded scope of methodological individualism, but they were embedded in the context of market imperfections and not perfectly clearing markets. Crucial to the New Classical Economics is the assumption of perfectly working and instantaneously clearing markets, supply always equals demand. This reflected the monetarist world vision that markets work well if left to themselves as well as an analytical challenge to argue otherwise than, “interfere in markets and you prevent them from working well”. The market imperfections approach offered an answer, especially in case of imperfect information. In such circumstances, it could be shown that markets might not be efficient, they might not clear (persistent imbalance between supply and demand), or that markets might fail to arise

altogether. This is so even if prices were perfectly flexible in principle. Indeed, an employer, for example, might not reduce wages despite high levels of unemployment in order to maximise profit through attracting more productive, disciplined and loyal workforce on average.

In short, the new market (and information) imperfection approach displayed an ability to address macroeconomic problems despite being based on the aggregated optimising behaviour of individuals. In this way, the technical apparatus of utility and production functions could be used to extend microeconomics to incorporate macroeconomics, even that with a Keynesian flavour. Together with other developments within microeconomics, especially those related to the now acceptable game theory, this allowed the use of the technical apparatus of consumer (and producer) theory to be extended almost universally across the discipline of economics. Areas that had previously been seen to be more applied, inductive and policy-oriented – from industrial through to development economics – increasingly came under the umbrella of the microeconomic principles that had only been established initially by accepting their limited scope of application.

Nor has this process of expansion of microeconomic principles been confined within the borders of economics. Previously, as indicated, economics imperialism had been based on the idea of treating the non-market as if it were the (perfectly working) market by other means. By contrast, with the market imperfections approach to the economy, the non-market could be understood as the induced response to those market imperfections, whether this be institutions, culture or customs. Whereas previously these had been seen as irrelevant or, at most, an irrational barrier to the (as if) perfectly working market, it was now possible to explain their existence and see them as a way of improving upon imperfectly working markets. The effect was to reinvigorate economics imperialism across a broader front and to render it more palatable to other social sciences despite its methodological and theoretical peculiarities from the perspective of other disciplines. Whilst methodological individualism of a special type (utility maximisation) persisted, it could be cloaked in less dismissive terms of the other social sciences. For it now accepted that institutions and history matter rather than being seen as at most temporary obstacles to the reach of the perfectly working market across all economic and social life.

Thus, economics imperialism has built upon old fields and created new ones in and around the borders of economics, the new growth theory, the new trade theory, the new economic sociology, the new institutional economics, the new welfare economics, the new political economy, the new economic geography, the new development economics, and so on. In a sense, it has done this in two different ways. First, it has brought back in what was previously left out in the reductionist process by which its technical apparatus was established. In general terms, the “social” becomes important where the social ranges over the non-market and the non-individualistic even though these still remain tied to optimising behaviour – individuals choose to be altruistic, for example, because it is a way of overcoming market imperfections or coordination problems.

Second, though, this often leads to what might be termed mixed or dirty models. Whether for theoretical or empirical expediency, the standard technical apparatus is supplemented by some other factor or set of factors appropriated from another social science or simply through speculative reasoning. This is to bridge the previous divide between rational and irrational. A good example is the recently prominent economics of happiness where populations do not seem to report themselves happier despite rising incomes over time. It is a simple matter to add in some other variable to utility theory to address this, the most convenient being reference to relative income position. Then we are able to explain why short-run increases in one person’s income improves feelings of well-being but not improvements in income for everybody over time as relative positions remain the same.

This is, however, to open a can of worms as far as utility theory is concerned. For, if utility is not given exogenously by the set of preferences attached to an individual but is subject to (social) influences, through comparison with others for example, then it is far from clear why other social influences should not be brought to bear. And these might have entirely different effects across different consumption goods. It is entirely arbitrary, or at least historically accidental, to start modifying given utility functions in order to explain why they are not given and to incorporate factors that were previously excluded in order to allow utility functions to prevail in the first place.

Yet, and this is the goal of this section in wandering away from direct attention to consumer theory to cover developments within economics more generally, it can be seen that within economics

and across the social sciences more generally, it has become commonplace to deploy the notion of the utility-maximising consumer (and other elements of neoclassical economics) to address any number of problems, even those apparently unrelated to (market) consumption as such. A recent example is provided by the economics of identity, with the latter understood as an element in a utility function (giving more or less utility depending upon the identities chosen by others). Significantly, this has been pioneered by George Akerlof, a leading exponent and Nobel prize-winner for the market and information imperfections approach to economics. Thus, whilst this has promoted the new phase of economics imperialism as an apparent reaction against the old-style and the neo-liberal notion that markets work well, the effect has been to consolidate and extend the status of the utility function for the study of consumption as well as for much else besides. Paradoxically, considerations of identity should lead to the rejection of the utility function as the basis for understanding consumption. Instead, we find identity treated as if it were (a flawed) consumption. But what are the alternatives?

6 From Consumer Theory to Systems of Provision

The weaknesses of the neoclassical theory of consumption derive from what was necessary to get it established, and which persist to a large extent once it had been established. They can be summarised as: the limited motivation and capacities of individual consumers; the reduction of consumption to the limited act of purchase as opposed to the processes attached to consumption from anticipation through to disposal, quite apart from supply of goods themselves; the failure to specify the nature of consumption goods themselves, as well as of individuals, other than in the most abstract fashion; the failure to take account of social influences and context; failure to recognise that the nature of consumption goods and of individuals depends upon time, place and circumstance and in interdependence with other individuals as individuals as such and as members of social categories defined by gender, class, race, nationality, etc; an exaggerated dependence upon axiomatic, deductive methods focused upon individual optimisation despite the limited applicability of the theoretical results to empirical study in light of aggregation problems; and a failure to engage with the insights of other social sciences, not least as these have been heavily pre-occupied with consumption across an extremely wide range of considerations that have been studiously ignored by economics.

The latter is true, for example, in many different ways. Not surprisingly, given the importance of consumption, and demand, to the profitability of commercial enterprise, consumer theory as such, and especially when attached to marketing science, has focused upon the motivation and behaviour of consumers and the meaning of goods to them, with some attention to the role played by advertising. Such studies have ranged over the psychology of consumers as well as the various variables associated with socio-demographics, sorting consumers into varieties of life-styles that may or may not induce or associate them with common purchasing patterns. From such approaches alone, a hundred or more variables can readily be teased out as influences upon consumption, with much emphasis upon empirical relevance as opposed to theoretical depth.

On the other hand, traditional treatments of consumption across other disciplines have been more analytical in content. For sociology, for example, there is the idea of common patterns or norms of consumption that are socially determined. These may be complemented by social processes internalised by individuals, such as emulation and distinction and conspicuous consumption. Perhaps it is significant that the latter is most closely associated with Thorstein Veblen, usually thought of as an economist, even though his theory of the consequential possibility of increasing demand as price increases would undermine standard theory. For anthropology, the significance of consumption is to be found in the different meanings that are associated with the consumed and the consumer, in extreme form when it comes to taboo, display or festival, religious or otherwise. It is obvious, but absented from neoclassical theory, that much of the meaning attached to consumption, and hence demand for consumer goods, must be socially determined and not simply derived from the physical properties of those goods. This became so much the pre-occupation of consumer theory at the height of postmodernism that the symbolic meaning of consumer goods took precedence over, even to the point of exclusion of, the material content of those goods. Not so much as the victims of advertising, but more out of their own volition, consumers could imagine consumption to be whatever they wanted, and to symbolise as such to self and potentially to others.

For the purposes of offering an alternative approach to consumption, the problem is less one of recognising this wider set of determinants than in placing them within an appropriate analytical framework. Within different social science disciplines, there has been a tendency to put forward what

has been termed horizontal theories. The classic example is economics itself with its dependence upon utility theory. This is horizontal in the sense that the theory applies across all consumption goods, and even determines the consumption of each good simultaneously, without regard to the differences between the goods other than by virtue of some notional differences in price and physical properties. But much the same can be said of other disciplines, in the sense that emulation and distinction, for example, or conspicuous consumption could apply to each and every good in principle. And psychological motives for consumption are also presumed to apply in principle to each and every good, across all of them. The goods only enter after the event in terms of whether they can or cannot meet the theoretically prior properties required of them.

On this basis, it might be thought that the best way to proceed is to stack together all the horizontal theories to be found and furnish a more or less complete theory of consumption. This will not work, though, because these theories will tend to be mutually incompatible, and there is no guarantee that we will have gathered together all of the relevant factors nor combined and distributed them appropriately across particular items of consumption. An alternative is to reject the idea that there can be a general theory of consumption, from which individual elements of consumption can be addressed. And, in place of a horizontal approach, a vertical approach can be adopted, one that focuses upon particular items of consumption. Then, for these, it is a matter of examining how consumption is tied to its determinants, both materially and culturally. This will vary from commodity to commodity. But we can trace how each of housing, food, clothing, transport, entertainment, etc, is attached to a different mode or system of provision (sop), running through from production to consumption, including the formation of corresponding norms and cultures (levels and meanings) of consumption. Second, though, such norms are not to be perceived as a single standard across everybody nor as an average level of consumption with some above or below to reflect these differences in consumption across and within commodities. Rather, the consumption of each commodity will vary across the population in terms of levels, modes and meanings of consumption. From an empirical point of view, the task is first and foremost to identify these norms of consumption as socially determined by socio-economic variables such as class, gender, age, race and region. Then these must be explained. In contrast, neoclassical consumer theory starts with the individual, constructs a theory, and then estimates empirical outcomes as an explanation rather than as something to be explained.

Thus, in case of clothing for example, we would need to examine the fashion system and how it is connected to the production of clothing (across everything from high class design to sweated child labour), its distribution and sale, and its display in the acts of consumption itself, with very different outcomes and determinants across countries, gender, class, etc. This is not to say that price and income are not important – far from it as much of the fashion system is about segmented markets and the shifting relations between them as high fashion does or does not trickle down through low cost production of copied designs, for example. But the consumption of clothing does not fit into a general, horizontal theory of consumption, and certainly not one in which all consumption is simultaneously determined by rational calculation across all prices and income. Some such considerations will apply to the food as to the fashion system. But, in itself, and across individual foods, how food systems function and how they reproduce (or transform) themselves both materially and culturally differs considerably, over time, place and context with, for example, fair trading and ethical concerns differentially coming to the fore in the current period in some respects. In this light, analysis of consumption cannot be divorced from the systems of production to which it is attached, not just because they set prices for goods but because they are driven by the imperative of profitability that leads to changes in the nature of what is provided and our attitudes to this as consumers. As suggested, the integral nature of what and how we consume depends on what and how it is provided, and how and why we consume it. This is complex and diverse across items of consumption. But, precisely because commodity production for profit is, in general, the source for our consumption, so how such commodities come to the market in large quantities and how they are accepted as such for the purposes of consumption, form the rationale for examining consumption in terms of distinct material and cultural systems of provision.[6]

7 Broader Implications

Consumer theory is paramount to neoclassical orthodoxy for two separate reasons. On the one hand, and most obviously, it represents in a sense half of a discipline that organises itself around supply and demand. Get demand wrong and more or less everything else is going to be wrong however well you deal with the supply-side. On the other hand, consumer theory is representative of the mainstream across a wider terrain than for demand alone, not least because it takes the optimising individual as

starting point. In this respect, the weaknesses and fragility of consumer theory are indicative of the same across the discipline as a whole, as can be seen in a number of ways.

First is to recognise that there is a strict correspondence between consumer and producer theory as can be shown in two different ways, especially when stripped down to technical content. The consumer, for example, can be interpreted as a producer running own firm in minimising the cost of producing a given level of utils at prevailing inputs prices for consumer goods (as is evident from the Hicksian demand functions). Strikingly, the indifference curves through which this is represented are identical to the isoquants for which producers minimise the cost of producing a given level of output, diagram 1 could as well be isoquants with output levels, not indifference curves with utility levels. At this level, consumer and producer theory are the same and the core principles of marginalism are reduced to a single diagram.

Second, though, there is a major difference between consumer theory and producer theory in that the latter has become much richer on the basis of the same initiating technical apparatus. The reason for this is of interest, for producer theory has used that apparatus to seek to address a whole series of problems associated with the functioning of the capitalist economy, ranging over the different ways in which firms compete with one another. The point here is not how well this is done, and it remains marked by its starting point (production functions and given technology, etc) much as does consumer theory (with given preferences and goods). Rather, the sorts of economic processes attached to supply, such as the entry and exit of firms to forge long-run equilibrium, cannot be embraced in relation to consumer theory since consumers are not like firms in this respect.

Third, then, this points to the failure of the orthodoxy to address the creation of consumers, whether by themselves or through social processes, in anything other than a token fashion. This is why consumer theory has stagnated conceptually within economics over a hundred years or more, as indicated in our opening remarks, whereas it has blossomed across the other social sciences. For this to be otherwise, economics as a whole would have to be radically transformed across its neglect of, and contempt for, the history of economic thought, its limited knowledge and account of its own let alone other methodologies, its intolerance of heterodoxy, and its failure to address interdisciplinarity adequately.

Fourth, this all reveals the extreme intellectual fragility characteristic of mainstream economics. The introduction or re-introduction of the factors, which were excluded in order that it might be established in the first place, reveal how limited it is, most obviously in relation to methodology, history of economic thought, intedisciplinarity, and heterodox alternatives. In case of consumption, this is blatant in terms of the core assumptions concerning the given and limited nature of goods and individuals, quite apart from the absence of social determinants. Yet, as indicated through discussion of the latest phase of economics imperialism, the technical apparatus associated with consumer theory (and producer theory as well) is being extended over a wider range of subject matter, both economic and non-economic.

Fifth, this is not only a paradox or irony, insofar as has been observed, that an apparatus that was established for narrow purposes by excluding so many factors, should then be used to explain what has been set aside, it also opens up considerable tensions around the borders of economics and possibly within those borders. For, the more economics applies its reductionist techniques across a wider scope, the more it exposes its limitations. Some have argued that this is liable to lead to the dissolution of the orthodoxy and its replacement by what is currently on its fringes, heterodoxies dealing in behavioural economics, game theory, and the like, especially as considerations from other social sciences are incorporated into economics.

Sixth, though, I take a different view. Mainstream economics has always displayed considerable resilience in face of the wide-ranging inconsistencies and tensions that it incorporates. It has done so by relying heavily on its technical apparatus of utility and production functions, and retaining these as a priority over resolving inconsistencies whether of a theoretical, conceptual, technical or empirical nature. This is obvious in light the nature of its treatment of consumption and the extension of that treatment to what is not consumption let alone the economic. As much as possible is made reducible to utility-maximising, even at the expense of inconsistency, incoherence, methodological inadequacy and massive empirical anomalies.

There are two ways in which the orthodoxy has traditionally excused, and even prided, itself for these devastating inadequacies. First is to make claims to mathematical rigour as a result of its axiomatic deductivism of which consumer theory is a leading illustration. But, as we have seen, the application of the theory of the optimising consumer is highly inconvenient. It positively shows that all sorts of unacceptable assumptions need to be made for preferences to be represented by a utility function, and for that utility function to be optimised in a well-behaved way. Further, setting this aside still leaves the problem of how aggregating over optimising individuals leads to well-defined aggregate demand curves on prices and income, unless we essentially assume society is made up of a single individual with a single indifference curve. And, once interrogated on these terms, the axiomatics does make transparent how reduced are the understandings of consumption, the consumer and the consumed.

Second, the use of econometrics plays a major role in economics, less in testing theories, and estimating parameters, as the conventional wisdom would have it, and more in blundering over methodological, conceptual and theoretical inadequacies. The way in which the econometrics is done is often as clumsy and arbitrary as the theory. And the idea that this in some sense mirrors the methods of the natural sciences, a rigour in empirical methods to parallel its mathematical methods, is laughable. For, the natural sciences do not base their assumptions on speculative reasoning governed by an unchallenged technical apparatus, and then deduce outcomes for empirical testing. Rather, the assumptions themselves are often closely empirically investigated and interact with the process of theory construction and investigation. This is not to say that economics should seek to emulate the methods of the natural sciences but, for consumption in particular, and the economy more generally, starting points should be made in capital, capitalism, power, conflict, class, etc, and with these attached to historical specificity and the cultures of consumption and the consumed in the practices of the situated consumer. In other words, for an economics of consumption to prosper, it must involve political economy and, or as, interdisciplinarity.

[1] This can be interpreted as follows. As the consumer is already optimising, the major (first order) effect of increasing a price on the utility you can get is equivalent to extra income needed to buy what you were already buying (and substituting into other goods is of second order importance).
[2] We know, subject to continuity, we can go from preferences to a utility function u( ) but there is not a one-to-one correspondence between the preferences and the utility function. This is because any monotonic transformation of u( ) also represents the same preferences. This is equivalent to having the same indifference curves (these do represent the preferences uniquely) but labelling each of them with a different number. The order of the indifference curves is all we need, not the quantity of utility that we assign to them. For this reason, utility as defined by indifference curves is known as ordinal. In a sense, it is like temperature – we know more or less (hotter or colder) but it is arbitrary how we grade it. This means we cannot go back from the Marshallian demand curves (or indirect utility function) to a unique utility function, u( ). We can only get back to a utility function subject to monotonic transformation (although this does represent the preferences uniquely). To do this, from the Marshallian demand curves, start with the n equations, $x_i = g_i(p_1, ..., p_n, I)$, take one price, p_1 say, as numeraire or set equal to 1, and solve for I as a function of the x_i . This can serve as utility function as utility increases with income, I, but any monotonic transformation of the function I would serve equally well as utility function and give us the same Marshallian demand curves. But the indirect utility function, v( ), would be different depending on what utility function is used to represent preferences.
[3] Given we are already optimising, the extra income needed to get a given level of utility in response to a price increase is to buy what you were buying already, with substitution possibilities of a second order effect.
[4] From $x_i = h_i(p_1, ..., p_n, u)$, we have n equations in the prices $p_1, ..., p_n$, the quantities $x_1, ..., x_n$, and u. But the h_i are homogeneous of degree zero (you buy the same consumption bundle if all prices double to get a given quantity of utility, it will just cost you double). This means we can set p_1, say, equal to unity, and eliminate the p_i from the n equations to get u as a function of the x_i. This is to retrieve the original utility function, u.
[5] It is equivalent to requiring that the matrix with typical element ($\delta^2 I/\delta pi\ \delta p_j$) should be symmetric, have positive elements off the diagonal and negative elements on the diagonal. These also guarantee that a minimum income is being obtained from the optimising for the dual.
[6] Neoclassical consumer theory can handle different goods as being more or less independent of one another in terms of levels of demand (subject to budget constraint across all goods) and does so in terms of what it calls separability. But this will be something that is assumed in the underlying preferences, not something that is explained.