

sanity, humanity and science

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Living in an affluent society: it is so ‘more-ish’

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Introduction

Who do you know with recent publications in top rated journals, who teaches at a one of the best economics departments and who has just written a best seller on the peculiar difficulties of living in an affluent society?

I suspect the answer is nobody; and I doubt that the reply would have been different had I enquired in a similar way during any of the last 40 years. However, had I asked the question in the late 1950s, there was someone: John K. Galbraith.

Of course, there have been other well known economists who have written for a popular audience, but none can match Galbraith’s style or his canvass. He is probably the only economist during the post-war period who comes close to Keynes in these respects. I was reminded of this the other day when I came across a Readers Union copy of *The Affluent Society* while I was browsing in a second-hand bookshop. I bought and re-read it; and it is a gem. Here is why.

The Affluent Society: the main argument

‘Among the many models of the good society no one has urged the squirrel wheel’.

So Galbraith remarks, yet living in affluent societies closely resembles a life on the squirrel wheel. This is the first aspect of the problem confronting those who live in a comparatively rich society. It arises because our aspirations get focussed on increasing income just as we have more of it than our parents or grandparents could ever have dreamt of. No sooner do we have more, than we want more....and so the wheel turns one more time, we re-adjust our beady eyes and begin to ascend the ladder again....with predictable effect.

This thought hardly needs introducing as it has achieved a certain acceptability in the mainstream now. The growing weight of the evidence, that we seem little, if any, happier than our parents or grandparents despite being much richer, has spawned a whole literature on how to account for the apparent absence of a relationship over time between the level of income and happiness. Galbraith deserves recognition for being one of the first to see this aspect of the peculiar problem of affluence and to have anticipated some of the contemporary explanations of this seeming paradox. For instance, his analysis of this problem centres on two, now well understood mechanisms that promote the expansion of ‘wants’ as income grows. One is the logic of relative comparison whereby one’s happiness is based in part on how we are doing relative to others. So when everyone’s income rises, no one feels better off. The other relates to the growth of industries, like advertising, which are concerned precisely to populate our dreams with hitherto unimaginable, yet now plainly desirable, objects.

The second aspect of the problem experienced by affluent societies is what Galbraith calls ‘social imbalance’. This is his early version of what he referred to later in a more revealing way as ‘private affluence and public squalor’. Our public services lag inexorably behind our private consumption. This is primarily, on his account, because there is no mechanism akin to the market that signals and generates the response of, for instance, more roads when we buy another car. The extra steel for this car gets produced, as does the material for the seats and the upholstery, because the increase in demand makes it profitable for these manufacturers to expand their output. But there is nothing like this with respect to roads or clean air. Yet just as surely, we will need more of these public goods as well as the steel and other privately produced

materials when we buy and drive our new cars. This is a political failure and, although Galbraith's analysis and conclusions are different, he is recognising the failure that later distinguished the Public Choice School. So, again credit is due to Galbraith for anticipating something that is now well recognised.

His primary solution to both dimensions of the problem of affluence is to mandate growth in expenditure on public services financed by a sales tax. In particular, there has to be much bigger expenditure on education. In part this is because the obsession with income growth is encouraging both parents to work, so that the need for child care is growing particularly fast. It is also necessary because the educational system supplies the one countervailing influence to the contemporary obsession with money. In other words, if we are to really enjoy being rich, then we have to build up our public services in ways that help sustain a more varied set of aspirations than just getting richer.

Although, this is a commendably Smithian view of the role of education in an affluent society, I suspect that Galbraith's particular remedies do not stand close inspection. This is largely because we have come to worry with the Public Choice School over what goes on in the public sector and our only remedy has the effect of recreating the mentality that only money matters within the public sector itself. I will say more on this below. I want to turn first to some of the supporting or subsidiary arguments in the book.

Some supporting arguments

There is a wonderful set of elaborations to the arguments that I have just sketched, but there are also a further group that Galbraith deploys in his analysis of our obsession with output and income. They are worth setting out because they signal something more about his contribution. It is perhaps most easy to bring out how these arguments come together and why they are interesting if I list the points made and comment on their contemporary resonance.

- 1) The ideas that we use to interpret events almost always relate to a different historical epoch.

On the one hand, this looks back because it is a version of Keynes's famous observation about politicians at the end of *The General Theory*, but it also looks forward because the same arresting conclusion, albeit drawn for different reasons, is one of the hallmarks of evolutionary psychology. It is important in Galbraith's argument as most of human history has known only the problem of getting enough to meet the strict necessities of life. Indeed in most affluent countries, it is only during the 20th century that real wages started to rise much above subsistence. As a result, our ideas regarding the economy have and continue to be dominated by concerns with raising output. What insulates this obsession from the reality of affluence is a combination of 2) and 3).

- 2) 'Conventional wisdom' reigns.

'Because economic and social phenomena are so forbidding, or at least so seem, and because they yield few hard tests of what exists and what does not, they afford the individual a luxury not given by physical phenomena. Within a considerable range he is permitted to believe what he pleases. He may hold whatever view of this world he finds most agreeable or otherwise to his taste.

As a consequence, in the interpretation of all social life there is a persistent and never ending competition between what is relevant and what is merely acceptable. In this competition, while a strategic advantage lies with what exists, all tactical advantage is with the acceptable. Audiences of all kinds most applaud what they like best. And in social comment the test of audience approval, far more than the test of truth, comes to influence comment.' (p.5).

.....Ideas are inherently conservative. They yield not to the attack of other ideas but to the massive onslaught of circumstance with which they cannot contend. (p.15)

Galbraith sets out in this way a view of what Kuhn later called 'normal science': in particular, its dependence on convention in the scientific community and its insulation from awkward facts. Sociologists of science have since made this idea commonplace, and it helps explain how we still fixate on output growth despite the experience of affluence, once it is also understood why output growth proves so agreeable to us as 'audience'---cue the third element in this group of arguments.

3) Output growth eases the tensions that come from inequality and makes for security.

This is why we applaud output growth. Inequality is always a potential source of tension in society, but this is mitigated by the growth in incomes because the numbers of people in absolute poverty falls. Likewise, the growth of output is fuelled by maintaining full employment and the most significant source of insecurity in society is the prospect of unemployment. Thus Galbraith is one of the early commentators to make the connections between growth and social harmony which have been central to social democratic politics in the postwar period; and when combined with the earlier two points we have a further explanation of how our expectations have become so narrowed on stuff, stuff and more stuff, please!

Does the analysis still apply?

Few cannot be puzzled by the appetite of the affluent. The absence of any measurable effect of income growth on happiness is only one part of what is strange here. The failure to take measures that will address the global warming that has been and continues to be generated by output growth increasingly appears like some form of death wish. There are also more local pathologies. The highest earners in the UK and the US actually work longer hours than their counterparts 20 years ago. So the pursuit of more stuff is seemingly ornamental because the getting of it is now cutting into the time that we have left to play with it. To put the issue bluntly, if we could for one moment step outside the squirrel wheel, surely we would conclude that we are interested in output growth to an extent which casts doubt on whether we actually know where our interests lie anymore. For these reasons, the subject of Galbraith's book is even more timely now than it was in the late 1950s.

How relevant, though, is Galbraith's analysis of the dynamics of the squirrel wheel for the contemporary world?

I have two criticisms here. The first is perhaps best summarised as a failure to anticipate the problem of identity. I believe that this holds the key to understanding why consumption is so central to our lives. There are two parts to this observation. One is that while one kind of insecurity does disappear with full employment, the collapse of traditional bonds of one kind or another in the modern world has made personal identity more fluid and with this fluidity comes another kind of insecurity. It is no coincidence that people talk now of identity politics. The term reflects the way in which identity has become problematic. So Galbraith was wrong to assume that full employment pushes insecurity into the background.

At the same time, consumer goods have more clearly come to form a language system. This is the important insight that anthropology gives economics. We use consumer goods to say things about ourselves and as our identity has become less well fixed through traditional bonds of one kind or another, we have had increasing recourse to the world of goods to do it for us. (Incidentally, this means that advertising is not so much a conspiracy, as Galbraith seems to hint: it actually works with the grain of human nature. And while making parenthetical remarks, it is perhaps worth adding that it is not just the advertising industry which plays such a crucial role, it is the whole set of mass media industries.)

The other part of the observation about identity relates to the intrinsic nature of relative comparison in general. Too often in economics, this has been treated pejoratively as a desire for status, something invidious, when it is actually more deeply rooted in a general sense in human nature. This is in part a lesson that Wittgenstein teaches us and it would be well for economists to take the point more seriously.

These are shorthand comments which sum to the thought that the impetus towards consumption is in some respects perfectly natural, if not ineluctable. We need to fix our identities and consumption has been a key arena in which this is done. Since our concern with identity is not going to disappear, this means that if we are not happy with the part played by consumption in this, then we have to think about how identity can come to be more closely associated with non-consumption activities. This directly feeds into my next critical comment because Galbraith, following Smith, was surely right to see that the education system is a potential source of some other value system. It is not the only source, however, and nor is it an easy solution. This is the source of my second critical reflection.

There is a fundamental difficulty that has arisen with the public service solution to the problems of a market society. We apparently no longer trust public servants to do the job, and so require that they are accountable, and often minutely so, for their actions. But in making them accountable through performance indicators and all the other penumbra of the audit economy, we have re-encountered the old problems of control found in Soviet style economies. It is actually worse than this. It is not just that close observation fails to produce the desired results because it can never be quite close enough, it is that the professional value systems that used to thrive in the discretion given to public servants no longer have any space. This is unfortunate because these professional value systems involve the subordination of strict individual self interest to some other standard that typically trades in concepts like 'honour', 'trust', 'just', 'the good', etc. These are the natural vocabulary of all alternative value systems and so their dwindling currency among all parts of the public sector is a source of some regret in this context.

Of course, this is not to be taken as an argument against accountability. Rather it is a complaint that our ideas regarding accountability are often terribly impoverished. What we need are mechanisms of accountability that work with the grain of professional judgement rather than the reverse, which is what we increasingly have now. The point is in a sense trivial, but one cannot sensibly expect public institutions to act as fount for critical reflection if the organisation of those institutions increasingly works with the very value system that one would like to see appraised.

I suppose that my two criticisms of Galbraith can be bought together in a single thought. It is that economics needs a better understanding of individual agency if the problem of the squirrel wheel is ever to be seriously addressed. This is, of course, happening in odd nooks and crannies and the point of writing this piece is not to dwell on these criticisms, it is to say that re-reading Galbraith is a marvellous encouragement to the enterprise.

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Complexity Economics and Alan Greenspan

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Complexity

Dynamic systems are ubiquitous throughout the universe. They range from nanomachines to the universe itself. And in their celestial form, they have been a subject of human inquiry for at least six thousand years. As a result, many of the themes of concern to complexity researchers have already been studied in astronomy, biology, cardiology, chemistry, computer science, demography, economics, electricity, game theory, mathematics, meteorology, physics, et cetera, albeit in each case from the perspective of a particular scientific discipline.

But it is only recently that we have come to recognize that many dynamic systems long considered “independent” actually constitute a single family, one which we now call complex systems. Examples of the latter are biological species, cardiovascular systems, economies, human societies, neural systems and securities markets. What ties these seemingly diverse systems together and how their common features came to be recognized are the subjects of this section.

For example, “the invisible hand”, first noted by Adam Smith in 1776¹ is a classic example of the “emergent properties” so characteristic of complex systems. Whenever the potential buyers and sellers for a particular good or service reach a critical mass in terms of number, they may spontaneously organize into a decentralized, competitive market which exhibits a coherent set of prices. Moreover, this set may remain in equilibrium for a considerable period of time. As this market coevolves with other markets and with its cultural, ecological and institutional environments, it may not only exhibit types of dynamics which are either unique or those which are common to markets as a class, but also some or all of those which are common to complex systems.

But it was not until the 1970’s that researchers in these diverse fields began to talk to one another sufficiently to overcome the interdisciplinary barriers of concepts, jargon and pride and achieve a painfully won breakthrough in mutual understanding. At some point, some of them came to realize that the apparently distinct objects of their affections had something in common, enough for these features to be fruitfully studied within the scope of a new discipline, which came to be known as “complexity”, among other names. Like the famous blind men, they realized that they were all feeling the same animal (or at least related versions of the same animal) only this “animal” was a good deal more complicated and complex than an elephant!

Today, with a proliferation of business advisory groups, conferences, consultants, fellowships, journals, research institutes, seminars, workshops, et cetera, complexity is here to stay, despite occasional expressions of doubt from within and without the discipline.² Moreover, the students of complexity have already been able to give useful advice to economists, managers, politicians and others.³ In this, they resemble the “mature” discipline of biology, which continuously contributes to the invention of medicines which cure people and save lives, even though it still cannot tell us what constitutes “life” or how life came about.

Nevertheless, the goals of many complexity researchers seem to have become more modest. Whereas once some of them dreamed of uncovering the equivalent of Newton’s mechanics for all complex systems, many would be content to find for each type, a set of laws governing its dynamics and then some general principles underlying all of these sets. These principles would then become the foundations of a mature discipline of complexity.⁴

Moreover, as a young discipline, complexity still has many issues to resolve. These include a lack of consensus on basic definitions, on metrics, taxonomy and terminology. There is also an urgent

need to improve theoretical constructs and develop new ones, and to perform many more empirical validations.

Some of the open questions yet to be answered include — What exactly do we mean by “complexity” and “complex systems”? What is an “emergent property” and how does it “emerge”? How do we model and explain the dynamics of systems which are capable of manifesting such diverse behavior as “lockins”, “multimodal” behavior, “path dependence” and “branch jumps on the possibility tree”, all within the planning horizon of the observer/participant?⁵

Some outstanding characteristics of complex systems are the following.

- Once a critical mass of potential participants has been reached, they spontaneously self-organize into a dynamic system of successive hierarchies. This is done by a process of mutual accommodation, without central direction, planning or programming.⁶
- With only modest intelligence, local information and simple rules for interaction, the participants in these systems can generate very complex system behavior. This is due in part to the positive feedbacks which may occur from events in the life of the system. In turn, the latter are due (in part) to the existence of increasing returns to scale, such as those which may be provided by network effects. As a result, there is no need for strong assumptions about the capacity, knowledge or rationality of the participants, although none of these properties are prohibited. (So much for rational expectations!)
- Once formed, complex systems exhibit surprising properties, called “emergent properties” which cannot be deduced in advance from the properties of the participants, from the rules for their interaction or from any combination thereof. Adam Smith’s “invisible hand” was one of the first to be recognized.⁷
- A complex system is likely to spend more time in disequilibrium than equilibrium. And there is no guarantee that departures from equilibrium will be short, in either distance or time. (Keynes lives!) Moreover, being in equilibrium may even be suboptimal, if it means that you are “asleep at the switch” and are going to be “zapped” by a competitor, as happened to the US auto manufacturers on the eve of the first Japanese assault on their market share.⁸ Finally multiple equilibriums are also possible.
- The dynamics of a complex system are best described by non-linear as opposed to linear relationships⁹, but as yet it is not possible to accurately model the former. The closest one can come are simulations based on cellular automata.¹⁰ Despite their limitations, these models produce behavior similar to the observed behavior of real systems.¹¹

An important subfamily of complex systems are both adaptive and evolutionary (CAE systems).¹² Some important characteristics of CAE systems are the following.

- CAE systems co-evolve with their environment(s) and/or other system(s). Examples are the interactions of deer, soil, vegetation, weather and wolves; biologically healthy lakes being managed for multiple use; and of course, a national economy in a world of other economies, national and international institutions et cetera. This co-evolution is often more “bouncy”, complicated and faster than Darwin imagined for biological species, and may involve symbiosis as well as competition.¹³
- In the medium and long runs, the evolution of a CAE system is liable to be unpredictable, in both space and time. To be sure, the inherent characteristics of the participants, their initial endowments and institutions, the environments within which the system operates and phenomena such as lockins and path dependence¹⁴, may set a certain “tone” to the

system's evolution and for a while at least, keep it within a fairly compact region of its possibility tree. However, other factors, some like the bumpers in a game of pinball, will eventually set the system off in unexpected directions. These include "visits" to chaotic and random modes, the importance of initial conditions in the case of the former, the unpredictability of outcomes in both cases, increasing returns to scale, political crises, technological innovations, epidemics, wars and branch jumps on the possibility tree.

- Given the foregoing, the "best estimate" forecasting long favored by American automobile manufacturers and Marxist dictatorships (among others) is "out", and "scenario planning" is "in".
- Long-run optimums cannot be defined and may be multiple. So every investment plan must be "re-optimized" from time to time. And in comparing investment options, strategic merits and robustness against surprise may be more important than an incremental advantage in terms of the internal rate of return.¹⁵
- In a world of CAE systems, a new kind of manager and a new kind of planner are required. Also and for the first time in history, "antenna people" become important. These are people who can detect whether the current scenario is unfolding as planned, shifting under ones feet or turning into something unforeseen, and do so in time for the organization to avoid being ambushed!¹⁶

Alan Greenspan

In the last few years, a number of agencies of the US federal government have hired consultants who specialize in applying the fruits of complexity research to strategic planning and/or to management. In August 2003, there occurred what may turn out to be one of the biggest breakthroughs of all for complexity theory and in a most unlikely place, Jackson Hole, Wyoming. Moreover, it happened at a symposium sponsored by the Federal Reserve Bank of Kansas City, located in what some consider "the heartland of America". Speaking on "Monetary Policy under Uncertainty" and clothing his message in the traditional language of risk management, Alan Greenspan, Chairman of the FRB, expressed numerous ideas which could have come straight out of the mouth of a complexity economist. If my suspicions are correct, complexity economics has *partially* penetrated one of the greatest bastions of the US economy.

Chairman Greenspan's talk is only five pages long. Following are a few quotes from this extraordinary document.¹⁷ [Italics are mine.]

"*Uncertainty* is ... the defining feature of [the monetary] *landscape* ... As a consequence, the conduct of monetary policy ... requires an understanding of the many sources of risk and uncertainty that policy makers face ...

"...a critical result [of the attempt to achieve this understanding] has been the identification of a relatively small set of key relationships that, taken together, provide a useful approximation of our economy's dynamics ... [However] our knowledge about many ... important linkages is far from complete and in all likelihood will *always* remain so. Every model ... is a vastly simplified representation of the world that we experience ...

"... a prominent *shortcoming* of our structural models is that ... not only are economic responses *presumed fixed* through time, but they are generally assumed to be *linear* ...

"... also the relationships underlying the economy's structure change over time in ways that are difficult to anticipate ... what constitutes money has been obscured by the introduction of technologies that have facilitated the proliferation of financial products ...

“A well-known proposition is that, under a very restrictive set of assumptions, uncertainty has no bearing on the actions that policy makers might choose ... These assumptions are *never* met in the real world.

“... policy makers need to consider not only the most likely future path ...but also the *distribution* of possible outcomes about that path ...

“A policy action that is calculated to be optimal ... may *not* in fact be optimal, once the full extent of uncertainty ...is taken into account ...

“... only a limited number of risks can be quantified with any confidence. And even these risks are generally quantifiable *only* if we accept the assumption that the future will replicate the past ...¹⁸

“... Our problem is not the complexity of our models but *the far greater complexity* of a world economy whose underlying linkages appear to be in a *constant state of flux*.

“Rules by their nature are simple and, when [both] significant and shifting uncertainties exist in the [economy, these rules] cannot substitute for risk-management paradigms ...

“... monetary policy based on risk management appears to be the most useful regime by which to conduct policy ...”

I wrote the Chairman about this speech and received a Delphic reply from one of his assistants, assuring me that the Chairman will continue to consider such factors in the future! So if he has embraced much of the complexity message, he is not yet “out of the closet”. His language is veiled, and his “conversion” is incomplete.

As regards the language, one conjectures that he has clothed his ideas in the mantel of risk management, so as not to scare his ex-coworkers on Wall Street.

As regards his philosophy, other positions adopted in recent years show that in some ways, he is still far to the right, in terms of the traditional US political spectrum.¹⁹ For example, in 2000, he denounced “irrational exuberance” in the stock markets, then refrained from action, when he could have sent a strong psychological message by raising “margin requirements”, the minimum down payment required for purchases of stocks on credit. Subsequently he opposed tax cuts. But once they were enacted (with 60% going to 10% of the taxpayers) he called for expenditure cuts in order to balance the federal budget. This of course leaves some 43 million Americans who lack health insurance “out in the cold”.

Nevertheless, “a cat” did “get out of the bag” at Jackson Hole. Let’s see how we can turn this felicitous event to our advantage, in the struggle to replace neoclassical economics with something humane and realistic.

Notes

1. Smith, A., *An Enquiry into the Nature and Causes of the Wealth of Nations* (Glasgow edition, two volumes, Oxford, 1976).

2. Durlauf, S., “Complexity and Empirical Economics”, Feb 2003, < ideas.repec.org >.

3. In addition to the examples mentioned previously, see also: Allison, M. A. and Kelly, S., *The Complexity Advantage : How the Science of Complexity Can Help Your Business Achieve Peak Performance* (McGraw-Hill, 1999), Axelrod, R. and Cohen, M. D., *Harnessing Complexity* (The Free Press, 1999), and Kupers, R., “What Organizational Leaders Should Know about the New Science of Complexity”, *Complexity* Sep/Oct 2000, among others.

4. Klüver, J., "The Evolution of Social Geometry", *Complexity* 09/01. For a detailed and erudite discussion of complex systems in different disciplines, see Bar-Yam, Y., *Dynamics of Complex Systems* (Addison-Wesley, 1997).
5. A "possibility tree" is a diagram which charts the possible evolutions of a dynamic system from its present condition in the form of a branching tree, on the assumption that each possibility can be discretely described and is related only to one antecedent and a few successors. An example of a "branch jump" would be if Oman, currently dependent on crude oil, suddenly found it economic to apply the Shell Middle Distillates process to producing diesel, kerosene and naphtha from stranded gas fields at isolated locations in that country.
6. Participants are called "agents" in the literature, which begs the question, Agents of whom? In fact, participants are often independent, as is the case with small business owners and stock-market players.
7. The formation of water from hydrogen and oxygen is sometimes cited as an example of an emergent property in chemistry. In fact, a Martian who knew about the valence electrons of these two gases and how earthly chemical reactions take place, could predict the possibility of water without ever having seen it.
8. The phrase "asleep at the switch" refers to the early days of railroading, when switches in the tracks were manually operated by a "switchman" who spent most of his shift in a small shack along side a telegraph instrument, waiting for word that a train was coming. Sometimes switchmen fell asleep, from alcohol or boredom, occasionally with disastrous consequences.
9. Mateos, R., Olemdo E., Sancho, M., and Valderas, J. M., "From Linearity to Complexity : towards a New Economics", 2004, < server.srcpc.unsw.edu >.
10. For example: Conway's "Game of Life" in Gardner, M., *Life and Other Mathematical Amusements* (Freeman, 1983) ; Epstein, J. M., "Agent-based Computational Models and Generative Social Science, *Complexity* May/June 1999 ; Gross, D. and Strand, R., "Can Agent-based Models Assist Decisions on Large-scale Practical Problems ?", *Complexity* Jul/Aug 2000, and Page, S., "Computational Models from A to Z", *Complexity* Sept/Oct 1999. See also < econ.iastate.edu/tesfatsi >.
11. For two additional candidate characteristics, see Chu, D., Strand, R. and Fjelland, R., "Theories of Complexity", *Complexity* 08/03 (2003).
12. The literature frequently refers to complex adaptive systems (CAS), a somewhat looser term which appears to encompass CAE systems. See Markose, S., "Markets as Complex Adaptive Systems" 09/03 < ideas.repec.org >.
13. Darwin, C., *On the Origin of the Species* (Harvard U. Press, 1964).
14. The reality of lockins is controversial and has generated a large literature for which I have not found a good summary. However, path dependence is common in developing countries. For an excellent example, see Reinhart, C., Rogoff, K. and Savastano, M. A., "Debt Intolerance", NBER working paper #9208, August 2003.
15. Some of the best examples of this kind of tradeoff are unfortunately the least accessible. For example, the debates between "bean counters" and "innovators" within pharmaceutical companies. And the internal debates between bean counters and engineers over energy conservation and renewable energy measures for existing factories.
16. See Smith, L. "Who Matters in a Complex Society ?", June 2004, Economics Web Institute. Go to Google Advanced Search, enter < economicswebinstitute.org > for English language only. Once "inside" this URL, look for above title and click on underlined word essay below the abstract.
17. http://www.federalreserve.gov/boarddocs/speeches/2003/200308_29/default.htm
18. A risk which is not quantifiable is no longer a risk. It is an uncertainty.
19. By our emphasis on disequilibrium, complexity investigators are not only "off the spectrum" but in rebellion against 250 years of economics. After all, in the final analysis, even Austrians, Marxists and Schumpaterians come down in favor of equilibrium as normal, if not also a good thing.

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Capabilities and Indeterminacy

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Emmanuelle Benicourt recently initiated an interesting debate by questioning the view that Amartya Sen has made significant contributions to post-autistic economics. This counters the popular position that Sen goes far beyond the conventional confines of welfare economics and liberal philosophy, thereby overcoming the limitations of the neoclassical economic mainstream.

Ingrid Robeyns (2002), for instance, considers Sen's idea of capabilities to be a consistent normative framework that 'effectively links commodities, observable outcomes and unobservable opportunities', offering thereby a far broader analytical scope than found in neoclassical economics. Benicourt challenges that view with the argument that the plurality of focus inherent in capabilities, not only precludes consistency on the normative front but renders the approach 'nonoperational for policy-makers' (Benicourt 2004).

In contrast, Jorge Buzaglo (2003), while not denying that Sen's capabilities approach has neoclassical roots, finds it to be a 'radical-progressive' variant, especially as he sees in capabilities an exploration of 'the preferences of the mind' in the Spinozian fashion. Benicourt takes exception to that position as well, by pointing out that Sen does not venture too far from the theoretical perimeter of the Arrow-Debreu model nor does he abandon the idea of society contained therein; in fact, his failure to completely escape the 'enchanted power of markets' is evident from the seemingly contradictory positions he assumes regarding the role of the state vis-à-vis markets in addressing the human plight (Benicourt 2004).

Interestingly, both sides of the debate appear to be revolving around the curious problem of indeterminacy that has long plagued the capabilities approach. Indeterminacy, it is contended here, occurs at three critical levels, namely, that of conceptualization, foundational specification and policy orientation concerning capabilities; consequently, a straightforward ideological labeling may prove to be rather elusive for a long time to come. In effect, the question of whether or not Sen makes a valuable contribution to the post-autistic tradition cannot yet be settled in any meaningful or satisfactory way.

Between Commodities and Utility

Sen uses the idea of a vector of functionings to define a person's state of being; in contrast, the opportunities to achieve well-being in terms of the range of feasible vectors available to an individual constitute that person's capability (Sen 1985). Evidently, the key element in the framework of capabilities is the idea of 'functioning' which Sen sees as 'consisting of beings and doings' enjoyed by an individual (Sen 1992, p.38). At a more fundamental level, however, the idea of capability and its constituent element of functionings are not so easy to separate. For instance, health is both a functioning and a capability (Gasper, p. 446); the same could be said about education which is a capability as well as an attainable functioning. Perhaps it is the needed 'ample spread' of functionings that obliterates the distinction between functioning and capabilities and renders the boundary between the two concepts considerably blurry (Gasper, p. 448). Interestingly, on occasion Sen himself has had to rely on functionings to clarify capabilities thereby attesting to the ambiguity of both concepts (Sugden, p. 821).

Be that as it may, capabilities are clearly predicated upon the availability of commodities in as much as the latter are necessary though not sufficient for securing the former. Sen is very wary about letting the capabilities idea fall victim to a commodity fixation. In his estimation, the commodities approach carries the danger of slipping into 'commodity fetishism' (Sen 1984, p. 510), the Rawlsian ideas of justice notwithstanding. Furthermore, the 'commodities' approach

risks reducing the question of human well-being into a matter of entitlements, that is, an undesirable state of dependency.

This of course does not mean that the 'utilitarian' alternative offers a way out either; this is because the idea of utility maximization is prone to rationalizing even the severest conditions of deprivation and therefore proves to be hopelessly inadequate in offering substance to the idea of capabilities. Sen is consequently careful about staying clear of the idea that the outcomes of revealed preference could serve as an operational metric for capabilities.

Not surprisingly, capabilities are best seen in relation to 'a moral or ethical space' so as to avoid the extremes of commodities or pleasure states (Crocker, p. 584). The curious middle ground, between commodities and utilities, however, means that the building of valuable functionings replaces conventional utility maximization with an active campaign to remove the constraints and impediments on the path of self-actualization for the individual.

It is worthy of note that the celebrated rejection of the conventional metric of well-being in terms of commodities or utilities, does not in any way mean discarding the underlying processes of commodification as well nor does it avoid the neoclassical predilection for individuating all problems concerning human survival. Sen in fact has no interest in taking up the question of nonindividualistic social orderings; on the contrary, 'he shares the premise of individualism with virtually all of contemporary welfare economics' (Beitz, p.283). For all intent and purposes, therefore, the processes underlying the making of commodities as well as the mechanics of individuation must be taken to be essentially costless in the forging of valuable functionings towards building capabilities.

On the conceptual plane, the idea of capabilities undoubtedly constitutes a movement from the concrete to the abstract as Sen deftly takes his audience backwards from commodities to the act of choosing and to the mental space underlying choice. Sen's apparent contentment in letting choices be guided by whatever 'people have reason to value', however, readmits preferences into the capability framework without first providing a theory of choice (Gasper, p. 440).

While capabilities are not grounded in either commodities or revealed preference, however, the failure to account for the behind-the-scenes processes of commodification and the formation of preferences as well as the logic of economic organization underlying choice, contribute to a general state of indeterminacy. Although Sen's prolific talents as an economist among philosophers are truly undeniable, the philosophical overtones of the capability approach do not lend itself easily to 'concrete' issues as pointed out by Benicourt (2002).

Not surprisingly, the capabilities approach passes on occasion for a 'patching operation' of sorts, in as much as Sen attempts to broaden the individual operational space without necessarily exploring the logic of preferences or admitting to the ever-present risk of consumerism (Gasper, p. 449).

Foundational questions

At the foundational level, the normative roots of capabilities are not so easy to establish, as Benicourt points out. Sen's rejection of 'externalist' normative standards has been seen by some as an effort to rise above both 'absolute' and relative standards to develop what some have referred to as a 'metaethical' and an internalist foundation (Crocker, p. 588). This raises the further question, as Gasper points out, of whether there is any guarantee that the functionings chosen will indeed be valuable in terms of larger social well-being or even in terms of the long-term welfare of the individual; Gasper uses the example of the Internet which may be used as much for speedy informational exchange as for the promotion of gambling and pornography, much to the detriment of the larger social whole (Gasper, p. 455). More fundamentally, there is the unavoidable issue of whether the winning of negative freedoms, a prerequisite for capabilities can

automatically assure positive freedoms that are generally claimed to be the essence of capabilities (Sugden, p. 821).

Sen has recently joined forces with philosopher Martha Nussbaum to establish the ethical underlining of capabilities, being careful to reject both extremes of paternalism and perfectionism (Pressman and Summerfield, p.432). Arguably, Sen has been after the cultivation of a 'moral space' that is presumably free of all social or cultural conditionings of individuals and therefore amenable to interpersonal comparisons. Sugden (1986, p.821) notes that there is a clear presumption of 'values' behind capabilities; for instance, the capability for right choice needs to be presumed before a broad range of choices could be deemed sufficient in terms of capabilities. However, this invariably suggests 'layered valuation' in as much as the exercise of choice itself happens to be a capability which in turn relies on subsidiary capabilities, such as, the capability to choose (Gasper, p. 456).

Despite appearances, however, capabilities do not constitute a morally neutral space since Sen is emphatic about rejecting both the utilitarian and libertarian standards (Crocker, p. 598). This in combination with the sheer pluralism of relying on the judgement of individual agents in determining valuable functionings precludes a clear normative foundation without which one encounters indeterminacy once again, albeit at another level.

In as much as the capabilities approach lacks a theory of human preference it appears to rely on the belief that the removal of external impediments is miraculously to bring out the best in individuals. Here then is an article of faith that takes the place of reasoned argument, an odd note in the general orchestration of capabilities. In the same vein, Sen's belief that culturally invariant values could be found through the capabilities approach seems more a hopeful claim than a logical proposition (Crocker, p. 605).

Ultimately, it appears that virtually all human conditions could easily be described in terms of capabilities or a lack thereof but this does not mean that we can explain in terms of capabilities. For instance, an equal distribution of material possessions among individuals does not necessarily imply equal capabilities any more than identical capabilities can assure equality in terms of material possessions. Where then is an objective standard that might help distinguish between the two scenarios? Evidently, the simple equating of poverty to capability deprivation might be no more than a definitional variation which says little about the concrete ways in which capabilities could be restored since material affluence in itself is no assurance of restoring capabilities.

Search for a metric

Sen approaches the human problem from the point of view of an enlightened policymaker who supposedly is able to rise above the fray and can judge what constitutes an impediment on the path of building the capabilities of individuals. However, one may very well ask where the policymaker's values come from or how she is able to gauge which impediments are to be dismantled in order to restore individuals fully to their capabilities.

Basu has described capabilities as 'an effort to develop a philosophical base and systematic method for the use of non-market data in evaluating societies'; however, he also warns that the use of such ideas as 'a vector of functionings' makes measurability rather elusive (Basu, pp. 70-72). From its inception, it seems, the idea of capabilities has been a search for a viable operational metric of human well-being and yet it is not difficult to see that such a measure is yet to be discovered. One might have reason to wonder if the very effort of enumeration does not somehow push the concept even farther away from the reach of objective standards. In as much as any approach to capability must logically constitute a capability in and of itself, the concept begins to lose distinctiveness. It is therefore hardly surprising that while upholding the

importance of substantive freedoms, Sen appears to be a bit circumspect about identifying the 'means' of securing such freedom (Qizilbash, p.161).

Given that the content of functionings and capabilities overlap considerably, all of this only adds to a general state of indeterminacy (Pressman and Summerfeld, p. 430). Not surprisingly, what Benicourt sees as a clear preponderance of correlations in operationalizing capabilities, could be taken as further affirmation of the lack of a theoretical system, in particular, the lack of a theory of well-being and human development (Gasper, p. 436). So far, there does not seem to be a sufficient set of concrete building blocks with which to define capabilities and that is the problem; it is this shortcoming that leaves one without a convincing metric. In the final analysis, the idea of capability is at times forced to serve as its own metric thereby becoming somewhat 'tautologous' (Gasper, p. 447).

There can be no doubt that Sen recognizes that 'a development ethic must be constructed in dialectical relation with empirical investigation into what causes and impedes development as well as what produces and prevents poverty, famine, etc.' (Crocker, p. 587). However, this also means that the criteria for judging the efficacy of the processes that are to secure the valuable functionings and desired capabilities have also to be derived from the same processes and that seems to be the root cause of all ambiguities and indeterminacy. In addition, it is the lack of specification of the capability dynamics that has led some to view the concept of capability as 'vacuous' (Gasper, p.454).

In the final analysis, the idea of capability begs a fundamental question: capability with respect to what? That is, there needs to be a clear predicate or a standard against which capabilities are to be judged and until that issue can be resolved satisfactorily, it seems, the approach is destined to remain more an abstract descriptive tool rather than an explanatory one (Pressman and Summerfeld, p. 429).

Merits of indeterminacy

Curiously, it is in indeterminacy that Sen appears to find the true strength of the capability approach because it presumably lends considerable flexibility to the framework, making it compatible with a whole range of perspectives under the sun (Pressman and Summerfeld, p. 429). Arguably, the capability approach is an excellent tool of criticism but the question is whether it lends itself to constructive policymaking. As a descriptive framework of well-being, capabilities perform rather well as is increasingly evident from such ventures as the Human Development Index that are intended to extend the conventional standard measures of well-being.

While one may not question the fact that the capability approach broadens the focus of the neoclassical framework to a considerable extent, the creation of a hybrid apparatus by thrusting what seem like heterodox values onto neoclassical foundations might not yield a determinate conceptual frame. The idea of capabilities may indeed represent an emergent paradigm as suggested by Robeyns but whether it may be identified as a particular identifiable ideological perspective or not is not so clear.

In view of the insurmountable fact of indeterminacy at all levels, as has been seen here, it is impossible to convincingly categorize the capabilities approach either as exclusively neoclassical or belonging squarely in the heterodox camp. While the label 'neoclassical' may indeed be a bit narrow in terms of scope, the idea that capabilities represent a 'radical-progressive' agenda may also be too bold a claim to make. As matters stand, any such labeling is rather premature and it might be best to await further development of the capabilities framework. Meanwhile, Benicourt ought to be congratulated for bringing several critical issues surrounding capabilities into the open; it is not only a timely venture but speaks well for the analytical health of the heterodoxy. Post-autistic economic thought owes her a huge debt of gratitude.

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Dynamic versus Static Efficiency:

The Case of Textile Exports from Bangladesh and the Developmental State

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This paper begins by outlining the neoclassical theory of efficiency, using international trade in Bangladesh as a case-study. This notion of efficiency is extremely narrow, and concerned only with the allocation of a given quantity of resources. Competition is better modelled as a dynamic process. This difference is considered in the context of Bangladesh. The phase-out of the WTO's Multi-Fiber Arrangement (MFA) quota regime will lead to intensified international competition for textile exports. Dynamic efficiency can be defined as a virtuous circle of increasing productivity, output and wages (the high-road). Likewise a vicious circle of reduced wages, longer hours and intensified working conditions is possible (the low-road). Neoclassical economics has no means to distinguish between these two processes, if all returns are equalised at the margin it is perfectly possible for both to be considered efficient. Dynamic efficiency is argued here to be an alternative paradigm to neoclassical economics. The implications for economic analysis and policy making are briefly considered. The principal conclusion of this paper is that the narrow view of efficiency has restricted the relevance of neoclassical economics. A more realistic interpretation of how economies function as dynamic not static entities is important in properly evaluating the conflicting and complementary roles of government intervention and the free-market. The most important implication of dynamic efficiency is in setting a theoretical basis of for the economic analysis of the developmental state.

Neoclassical Theory: Liberalisation and Comparative Advantage

The explicit theoretical rationale of liberalisation according to neoclassical economics is to achieve an efficient (static) allocation of resources. The link to economic growth is implicit, rational individuals will save according to criteria such as the life-cycle hypothesis, profit maximising firms will utilise these available resources to invest efficiently. In a free market there is no such thing as growth that is too slow, growth reflects the time preferences of individual agents. Price signals link the short and long-run and there is no need to consider the two separately.

In international trade neoclassical economics offers a strong theoretical prediction. The theory of comparative advantage states that a country will export goods intensive in its abundant factor, and import those intensive in its scarce factor. For South Asia with a relatively low area of land per person¹ and abundant labour, exports should principally comprise labour-intensive manufactured goods rather than primary sector products. Structural adjustment should see a shift in the composition of production from capital-intensive import substituting industries² to export-orientated labour-intensive industries. A well-documented and lauded example of such growth³ is the phenomenal expansion of the ready-made garment sector (RMG) in Bangladesh. Exports were negligible in 1979/80, by the late 1990s Bangladesh had become the twelfth largest apparel exporter in the world, the RMG sector accounted for about 76% of total export earnings. By the late 1990s the industry employed 1.5m people, 90% of them women. The change is efficient from a neoclassical perspective, the abundant resource (unskilled/ female labour) has been re-allocated (rural-urban migration) in a rational response to price incentives.

Efficiency in neoclassical Economics

The neoclassical concept of efficiency is extremely narrow, this is revealed in striking clarity by an examination of four well-used microeconomics text-books⁴. In general 'efficiency' gets only a passing mention and is entirely subsumed by the concept of Pareto efficiency.

In Gravelle and Rees (1992) and Kreps (1990) efficiency is solely a static concept concerned with the efficient level of output of public and private goods, efficient risk sharing, solution to bargaining, the Edgeworth Box, and Walrasian equilibrium⁵. In Mas-Colell (1995) efficiency gets six entries in the index, the Pareto concept appears 76 times. Kreps (1990) doesn't bother to separate them, "Efficiency, see Pareto efficiency" (p824) notes the index, Pareto efficiency in its various forms appears 26 times. Also in Varian (1992) efficiency appears only as Pareto efficiency (p225).

The necessary requirements for Pareto efficiency (Gravelle and Rees, 1992, p479-485) are 'efficient consumption', 'efficient input supply' and 'efficient input use' (production efficiency) and 'efficient output mix'. These are the "three types of efficiency embodied in a Pareto optimal exercise" (Mas-Colell, 1995, p564). The first is *consumption efficiency*, where consumers have allocated their budgets to maximise their own well-being (utility maximisation). The marginal rate of substitution between any two goods equals their price ratio. The second is *production efficiency*, where producers cannot alter the ratio of inputs to raise output or reduce the cost of a given volume of production. The marginal rate of technical substitution between any two inputs equals their price ratio. The final measure is *aggregate output efficiency*, where resources are allocated simultaneously to achieve both production and consumption efficiency. Where for example in a society of bipeds an equal number of right and left shoes are produced. Utility and profit maximisation will ensure consumption efficiency and the efficient use of inputs and composition of outputs.

Glancing again at the index in Gravelle and Rees (1992) at 'dynamic' reveals only a set of references that give more mathematical rigour to the concept of static equilibrium. By dynamic efficiency neoclassical economics means the existence, stability and uniqueness of equilibrium. Dynamic analysis is shorn of any substance and asks simply whether an economy in equilibrium (existence) subject to an exogenous shock will return (stability) to its original position (unique). There are a few cases such as the cobweb model which has a unique equilibrium but any deviation from which can produce an explosive divergence of price and output, such are at most given passing attention.

Imperfect Information and Market Failure: A Radical Departure?

Theorising on imperfect information and markets failures appears to be a radical departure from the neoclassical paradigm. However this analysis implicitly accepts efficiency as being a static concept, Pareto Efficiency as the benchmark and government policy as a means to make the world look more like the neoclassical theory.

If there exists a wedge between social and private costs (an externality), a taxation, subsidy or regulation can push the economy towards the overall social optimum. An optimal Pigouvian tax can replicate efficient allocation, see for example Mas-Colell et al (1995, p355). Similarly government policy may help solve the preference revelation problem for public goods, see Varian (1992, p425). There may be some problems government policy is unable to overcome such as moral hazard and asymmetric information in the market for bank loans. The market is then constrained to allocate resources in a second best world, see Stiglitz and Weiss (1981). The very notion of 'second-best' illustrates the striking normative preference for Pareto Efficiency

It is not with the analysis of market and information imperfections that we are forced to confront the implications of an alternative paradigm. The crucial assumption is an economy that is static, where efficiency is measured at a moment in time. In an alternative world, when we consider the dynamics of competition, investment and growth, what we mean by efficiency takes on a radically new meaning. An implication of this proposition is introduced in the context of future prospects for the Bangladeshi textile industry.

Competition is a Dynamic Process

As of December 31st 2004 textile and clothing products will be subject to WTO rules, with the final abolition of the MFA⁶. When the MFA was being implemented in the 1970s Bangladesh was not considered to be a viable exporter, consequently it was never subject to its strictures. Other potentially competitive exporters such as Sri Lanka, India, Pakistan and China have been subject to binding MFA quotas on apparel and textile exports. Bangladesh has been able to export into an open niche in world markets since the late 1970s, after 2005 Bangladesh will face intensified competition on world markets. There are broadly two potential outcomes, the low and high-road of competition. The latter is 'dynamically efficient', leading to rising wages and productivity over time. The concern of neoclassical economics with efficient allocation has no theoretical means to distinguish these two processes, as long as marginal equalities are retained according to neoclassical criteria even the low-road of competition could be judged efficient.

Dynamic Efficiency and the Low and High-Roads of Competition

Bangladesh is currently most competitive in price sensitive, low-value, low-priced items⁷. Bangladesh has two options to compete after 2005, raising productivity or reducing costs.

a) The Low-Road of Competition

Bangladesh could react to intensified competition by trying to enhance its price competitiveness within its existing niche by extending hours, reducing overheads (subcontracting) and intensifying work conditions (a low-road of competition). There is some evidence this path has already been pursued in the Indian textile industry.

c

The fragmentation, ruralisation and casualisation consistent with a low-road of competition has already had a profound impact in India. As early as the 1960s textile mills in Ahmedabad and Bombay began putting out weaving work to decentralised power-loom units. Pharmaceutical firms in Bombay passed on work to smaller units located away from the high-wage industrial belt. From the 1970s there was a general increase in the use of contract, temporary and casual workers. The share of casual workers in large factory employment rose from 4.6% in 1980/81 to more than 12% in 1993/94⁸. Subcontracting was not a significant activity prior to 1970, by 1978 it was a prominent activity in large factories with a share of 21% of total employment⁹. In India especially sharp has been decline of large urban cotton mills and ruralisation of the industry¹⁰. This ruralisation of labour is reflected in the fall in the average size of industrial units from 3.2 to 2.5 workers between 1961 and 1991. The fall in average employees per factory is true for most industries and has persisted throughout the 1970s and 80s¹¹.

b) The High-Road of Competition

A high-road of competition could consist of remaining in an existing production niche and raising productivity, or upgrading to a less (price) competitive market niche to capture rents. In the RMG sector Bangladesh may compete by capacity building to enhance skills in fashion, design, cutting and technology upgrading, developing backward linkages to suppliers to shorten lead times, and improving the skills and training of management and workers.

Good policy can be defined as that which helps achieve a high-road response to competition. Dynamic efficiency is a situation characterised by a virtuous circle of higher productivity, output growth and higher wages rather than having a rigorous mathematical definition.

Dynamic Efficiency, Rents and Learning

Dynamic efficiency is an alternative paradigm to neoclassical efficiency. In fact there is likely for various reasons to be trade-offs between static and dynamic efficiency. When we are considering dynamic efficiency good policy cannot be mechanically judged in terms of whether it liberalises the economy, encourages competition or expands the freedom of decision making. Policy is a far more nuanced process that has to be carefully evaluated in terms of its effect on the dynamics of investment, growth and competition.

a) Static and Dynamic Efficiency

One neoclassical assumption immediately disposed of when we consider dynamic efficiency is that no allocation or industrial structure is preferable to any other. In fact, while many allocations may be efficient, some are more (dynamically) efficient than others.

Neoclassical theory argues that export structures are simply a product of comparative advantage and factor prices. The composition of exports does not matter; no set of activities are more desirable than any other. There are no externalities, so returns are equalised at the margin (efficient allocation). Lall (1999, p1775) notes that spill-over benefits for the whole economy are positively related and ease of market entry of competitors negatively related to the technological complexity of a product. The consideration of dynamic efficiency is, much more than market or information failures, what creates the potential for industrial policy by the government. We can broadly define industrial policy as a deliberate action by the state to shift the structure of the economy away from its static comparative advantage to a structure offering more dynamic potential. We generate the first strong implication of our alternative paradigm: there may exist a trade-off between static and dynamic efficiency.

b) Profits and Efficiency

Profits in the neoclassical model are a temporary aberration of the market. Profits may exist temporarily before resources and factors flow into a sector and compete them away. In a dynamic world profits (or more correctly rents) are useful to induce and reward learning in order to raise productivity or upgrade to higher value-added and less price sensitive sectors. Learning is much like patents that reward innovation in a developed country.

Neoclassical economics assumes innovations take place in advanced countries and learning in less developed countries (LDC) is no more difficult than selecting the most appropriate. Innovation (shifting the production frontier) is distinct from mastering/ adapting technology¹³. In truth, though much technology is tacit, experimentation and learning are necessary to understand the tacit elements and adapt them to local conditions. In practise there is less difference between innovation in developed countries and industrialisation based on learning already commercialised technology.

Investment in learning by one entrepreneur in discovering a commercial niche that can be profitably exploited is likely to lead to rapid imitation¹⁴. If such learning requires investment, the returns to which cannot be fully appropriated, entrepreneurs in LDC's face similar problems to innovators in developed countries. While neoclassical economics subscribes to the need for patent protection to generate an incentive for innovation, it advocates complete freedom of market entry in all other scenarios. LDC investors should not get patent protection no matter how high the (external) social return. Entrepreneurial learning is likely to be under-supplied. Profits / rents that reward and motivate learning may lead to a more dynamically efficient economy even if they are a sign of resource misallocation according to considerations of static allocative efficiency.

c) How do we Evaluate Policy?

The analysis of policy intervention in the static neoclassical model is easy, anything that increases the scope of the free market and free decision making is a good thing. When we consider our alternative paradigm, that of dynamic efficiency, the analysis of policy is much less clear. Policy needs to increase the expected payoff to learning, hence it is important to distinguish firms that are engaged in costly learning and those who simply imitate the results of others' learning. The parallels with innovation and patent protection are evident.

Temporary trade protection may increase profits from learning but only for firms producing for the domestic market¹⁴. Trade protection does not discriminate between innovators and imitators. This will promote early entry and lower the expected return to learning. Export subsidies avoid the anti-export bias of trade protection but likewise do not discriminate between learners and imitators. Export subsidies can be relatively good at discriminating between successful and unsuccessful performers ex-post. Providing subsidies or government credit contingent on exporting can allow policy makers to discriminate between firms.

d) Dynamic Efficiency and Liberalisation

Neoclassical analysis of efficiency pre-supposes that good economic policy consists of removing constraints on the operation of the free market. Individuals are rational, so any constraints on voluntary options and mutual exchange can only reduce welfare and efficiency. One exception is that of game theory, or more precisely the 'Prisoners Dilemma'. This illustrates a situation in which individuals acting in their own self-interest generate a socially sub-optimal outcome. Some sort of constraint is necessary to prevent individuals rationally defecting to maximise the social return. The literature has typically analysed this in terms of extra-economic factors such as trust, culture or coercion. For example:

"an economy can perform well only to the extent that it is embedded in a well integrated society, and that a society exists only to the extent that it is capable of imposing normative constraints, or social obligations, on the pursuit of individual interest."¹⁵

This kind of analysis has not closely informed macro-economic policymaking, which remains heavily imbued with a liberalising bias. Once we consider efficiency in a dynamic rather than static perspective it is easy to generalise this finding from game theory: good economic policy cannot be reduced to removing constraints on rational actors. The pressure of competition may generate a counter-productive temptation of short-termism. Constraining obligations may on occasion increase productivity. Employers who are permanently prevented by high labour standards from being competitive as low wage mass producers may be compelled to produce high quality customised products. Constraints can open up otherwise unknown opportunities by making learning unavoidable. Having fewer choices may foreclose short-term remedies and stimulate strategic creativity beyond present interests and structures. The argument is sometimes made in the case of minimum wages, a form of intervention impossible to support in a static neoclassical world.

This question is of immediate relevance to Bangladesh. Currently unions are forbidden from operating and organising in Export-Promotion-Zones where many of the RMG factories are located. Japanese and Korean foreign investors are threatening to withhold FDI should the law be amended. Concerned institutions in the US motivated by 'fair trade' rhetoric are pressing for this to happen under threat of countervailing import duties. Placing a floor under the process of cost-cutting, longer hours and intensified working conditions may force producers to pursue a high-road to international competition.

Conclusion

Successful policy cannot simply be judged in terms of the degree to which markets are liberalised. Once we consider economies as dynamic rather than static entities and evaluate policy in terms of achieving dynamic not static efficiency, what we conceive of as good policy becomes far more nuanced. The impact of policy on learning and imitation is relatively clear, but the relative merits of trade protection, export and government subsidies are more subtle and complex. Certainly we can say liberalisation has to be carefully compared and evaluated against other possible policies; certainly liberalisation can only ever be a policy means to achieve a given end; it certainly cannot be judged an end in itself. Beginning with a benchmark of 'dynamic efficiency' we have arrived at the theory of the developmental state, this is the archetype of a dynamically efficient economy. The developmental state is an alternative to neoclassical efficiency, not an occasional aberration and second best-solution to allocative inefficiency¹⁶.

Notes

1. A.Wood and M.Calandrino, 'When the Other Giant Awakes: Trade and Human Resources in India' (2000), University of Sussex, IDS Mimeo.
2. Which were prominent parts of the domestic industrial structure in India especially before liberalisation.
3. Y.W.Rhee, 'The Catalyst Model of Development: Lessons from Bangladesh's Success with Garment Exports', *World Development*, (1990), 18:2, p333-346. This paper argues this growth was not due to liberalisation but to the Korean firm Daewoo providing a catalyst, in the form of FDI in the RMG sector with a very heavy emphasis on developing indigenous capabilities in Bangladesh.
4. These are H.Gravelle and R.Rees (1992), *Microeconomics* (2nd Edition) (London, Longman, 1992), H.R.Varian, *Microeconomic Analysis*, (Third Edition) (London, W.W.Norton and Co, 1992), D.M.Kreps, *A Course in Microeconomic Theory*, (London, Harvester Wheatsheaf, 1990), A.Mas-Colell, M.D.Whitston and J.R.Green, *Microeconomic Theory*, (Oxford, Oxford University Press, 1995).
5. The nearest to an exception is repeated games (Game Theory).
6. Multi-fibre Arrangement which places quotas on the exports of apparel and textiles from LDCs to developed countries.
7. All data from M.Muqtada, A.M.Singh and M.A.Rashid (eds) et al, *Bangladesh: Economic and Social Challenges of Globalisation*. (Dhaka, University Press Limited, 2002).
8. K.V.Ramaswamy, 'The Search for Flexibility in Indian Manufacturing: New Evidence on Outsourcing Activities', *Economic and Political Weekly*, (1999), 34:6, pp. 363-8.
9. B.Harriss-White, *India Working: Essays on Society and Economy*, (Cambridge, Cambridge University Press, 2003).
10. T.Roy, in S.Uchikawa (ed), *Economic Reforms and Industrial Structure in India* (New Delhi, Manohar, 2002), pp. 85-111.
11. R.Nagaraj, 'Organised Manufacturing Employment', *Economic and Political Weekly*, (2000), pp. 3446.
12. S.Lall, 'Technological Capabilities and Industrialisation', *World Development*, 20:2, pp 165-186 and A.H.Amsden, 'Editorial: Bringing Production Back in – Understanding Governments Role in Late Industrialisation', *World Development* (1997) 25:4, p469-480.
13. Y.W.Rhee (1990) notes that the number of export-orientated RMG factories in Bangladesh exploded after the single firm Desh proved it was a profitable proposition at the end of the 1970s, by 1985 there were 700 such firms.
14. R.Hausmann and D.Rodrik, 'Economic Development as Self-Discovery', *Journal of Development Economics*, (2003), 72, p603-33.
15. W.Streeck in J.R.Hollingsworth and R.Boyer, *Contemporary Capitalism: The Embeddedness of Institutions*, (Cambridge, Cambridge University Press, 1999) p199.
16. See H-J.Chang, in M.Woo-Cumings (eds) 'The Developmental State', (New York, Cornell University Press, 1999).

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A Neoclassical Hole in Neoclassical Free Trade

Ian Fletcher (American Engineering Association, USA)

The myth reigns that, whatever may be said about the political case against free trade or its collateral damage, serious economics answered the economic case in its favor long ago. The interesting thing, from the point of view of post-autistic economics, is that if one knows where to look, this is not only not true, it is not true *even within the neoclassical framework*.

There are several known exceptions to the case that free trade is best. Let's look at one in particular that is perhaps the most fundamental because, unlike many arguments against free trade, it does not touch upon thorny industrial policy questions or the debatable wisdom of government. The argument is not unknown – though grossly ignored relative to its significance – so we can find properly-mathematized versions of it in a number of places. Like in the paper “Factor Price Equalization in a Dynamic Economy,” published in 1970 by Joseph Stiglitz in the *Journal of Political Economy* (pp. 456-88)¹

Disclaimer: the argument presented below is a simplification, and in particular, the scenario described is only one of several possible outcomes that Stiglitz's paper and others like it discover.

Begin a thought experiment with two wholly protectionist nations living side-by-side. Trade is forbidden. Make one a “decadent” nation that values short-term consumption over long-term. Make the other, a “miser” nation, the opposite.

The difference between them is, of course, time preference for consumption, conventionally designated in economics with the Greek letter rho (ρ). Individuals have such a time preference and so do societies in aggregate.

Now lift their protectionist barriers so these nations can trade. And let them lend each other money so that if one wants to run a trade deficit with the other by buying more than it sells in return, it can, by borrowing the difference between what it spends on imports and what it earns by exports.

Then see what happens. The mathematical model runs out the various possible scenarios. The precise outcome depends on a number of variables not relevant to the present argument, but one scenario in particular is very interesting.

What happens in this scenario is that the decadent nation maximizes its short-term consumption by buying all the imports it can get. This means all it can afford to buy with the money it earns from exports *plus* all the money it can borrow from the miser nation.

The miser nation is delighted to lend the money because from its point of view, this lending is an investment in an interest-bearing asset and having its neighbor open up as a field of investment has expanded its range of investment opportunities. Within the *ceteris paribus* assumptions of the neoclassical model, this enables it to make better investments.

Because the decadent nation can now consume more in the short term, it is (for now) materially better off. In neoclassical terms, it has better maximized its utility. Its miser neighbor, too, enjoys a higher utility, because it can more efficiently eschew present consumption in favor of piling up for the future.

Within the neoclassical framework, everyone is now better off, and this conclusion agrees happily with the libertarian intuition underlying neoclassical economics: an increase in freedom makes people better able to better themselves.

So is free trade vindicated?

No, because then comes the *denouement*. The increased well-being of both nations (as they define it, remember, decadently or miserly, in terms of maximizing consumption in the short or the long term) depends upon the ability of the decadent to borrow. And one cannot borrow forever.

What happens is that the decadent nation slides deeper and deeper into debt, while the miser nation gets richer and richer as it accumulates wealth in the form of the money owed to it by the decadent one. So while both nations are indeed better off in the short run, in the long run one gets richer and richer, the other poorer and poorer.

And there's a twist: what if the decadent nation enters into free trade at a time when it is much richer than the miser? This means that instead of borrowing money from the miser to pay for the difference between its imports and its exports, it can gradually sell off its existing assets. But this is just mortgaging the house to pay for groceries: it results in the same net transfer of ownership of wealth between the two nations.

Remember that, within the simplified two-nation model, the basic mechanics of balance-of-payments theory is not controversial. Trade policy is debatable, but it is axiomatic that a nation must pay for its imports in one of three ways:

1. by exports,
2. by borrowing money,
3. by selling existing assets.

This is a simple consequence of the fact that when citizens of one nation obtain goods from citizens of another, they must give something in return if they aren't robbers. If one generalizes from a two-nation to a many-nation model, there can be round-robin trade or any complex network, but the fundamental principles don't change.

Our little thought experiment makes clear the answer to the paradox that underlies all criticisms of free trade that take place within the libertarian intuitions that dominate neoclassical economics:

How can reducing people's freedom make them better off?

The answer, obvious enough once one thinks about it in the way implied by our experiment, is this:

People are better off with less freedom when they would use that freedom to hurt themselves.

In the present experiment, this means that the citizens of the decadent country would be better off if their inability to trade with foreigners prevented them from being even more decadent than they already are. Protectionism for them is like a restriction on an heir's squandering his inheritance. In this experiment, the "inheritance" is the entire accumulated wealth of the decadent nation that can be gradually sold off to pay for present imports. Plus its entire future debt-servicing capacity which can be used to float debt to pay for present imports.

Under free trade, the natural temptation is for the present generation to maximize its consumption by having either past generations (who produced the existing wealth that can be sold off) or future ones (who will have to service debt it incurs) pay for it. It's a wonder it doesn't happen more often, and shows why it is false and dangerous to conceive of society as simply an aggregate of its present individuals, an assumption that easily creeps into social science and thus policy. There may be some value to Edmund Burke's conception of society as a compact among generations, even if one rejects his political conclusion that this gives tradition a normative claim on the present generation.

Another point, which makes clear why globalism is wrong and nations do matter to economics: if the “decadents” in a society can only borrow from the “misers” in the same society, every borrower creates a lender in the same society, keeping the society as a whole in balance. But if they can borrow from foreigners, an entire society can “go decadent.” This can spiral out of control, given the self-reinforcing way in which the social and cultural validation of behavior within a society creates more behavior, then more validation, then more behavior and so on. So it *does* matter whether people engage in economic relations with compatriots they share a social system with, as opposed to foreigners with whom they do not.

This also means that, *pace* neoclassicism, people really can have better and worse preferences. Neoclassicism treats people’s preferences as “exogenous” to its model: they just want what they want and it is the job of economics to describe efficient and inefficient ways of getting it, not judge whether their wants make sense. That would be a value-judgment outside the scope of economics as an empirical social science, akin to a preference for pork vs. beef.

The problem with this is that the preference for long-term vs. short-term consumption is not a matter of indifference if one makes the strictly speaking dogmatic, but utterly reasonable in the real world, assumption that a nation wants to become more prosperous over time, not poorer. If one is genuinely agnostic about this question, then the whole argument here falls apart. But no sane person or nation is.

Neoclassicism tries to have it both ways: it demands public respect on the grounds of being an objective science aimed at a public good, economic efficiency, but it also claims, in the fine print, to be value-free. And the logically inescapable consequence of aiming at an efficiency that is agnostic about ends is the possibility of efficiently satisfying self-destructive preferences. Neoclassical economics tries to finesse this problem by tacitly assuming that nobody has such preferences, but as we have seen, they are clearly possible.

This explains, by the way, why this problem has been mostly ignored. Within the rigorously logical, though practically absurd, assumptions of neoclassical economics, it is merely a mathematical curiosity that free trade can make a nation worse off by seducing it into unsustainable debt-fueled pseudo-prosperity. That nation’s preference was for short-term consumption, and that’s what it got. Its utility was maximized. Maximum freedom produced maximized utility, so neoliberalism is confirmed once again.

In case you’re unaware of the quantitative data, the United States is the nation corresponding most closely to the decadent nation above. The archetypical miser nation is Japan, but includes a number of other nations whose public policy tends to bias their economic systems towards long-term over short-term consumption. The empirical facts are pretty much what our thought experiment would suggest: the USA maintains for now the world’s highest level of consumption, but is running a huge trade deficit and is the world’s largest debtor and biggest borrower.

The neoliberal retort to this problem is that it must self-correct eventually when the dollar collapses, pricing imports out of reach. True, but because America’s ability to assume debt and sell assets can postpone this collapse for years, it may not be the smooth correction that neoclassical models imply. Our thought experiment shows how the key is debt, because debt, confidence in which can collapse overnight, can turn this smooth adjustment into a volatile whipsaw. This insight oddly resembles Keynes’s attack on the classical model: credit is the joker in the deck that disturbs the celestial harmony of free markets. The *dénouement* may be a sudden collapse that comes after America’s industrial base has been ground down by years of cheap imports, resulting in a loss of entrenched industrial advantage that cannot be regained at feasible cost.

The potential perversity of rho, time preference for consumption, has implications beyond free trade and raises doubts about many other areas of economic policy over the last 25 years. For example, financial systems have been deregulated in many nations on the assumption,

understandable within neoclassical assumptions, that this is efficient. But what if this just enables people to sink into debt more efficiently? It seems that many of the quaint old restraints on finance may have served, in a theoretically unrigorous way, to restrain the self-destructive tendencies of certain economic actors. It is no accident that the Bretton Woods system, which limited international capital flows, coincided with smaller trade deficits? If efficiency can be perverse, we can be better off inefficient.

Once one realizes how treacherous efficiency can be, and how important preferences are, it becomes clear that economics needs to focus less on the former and more on the latter. One surprising result of all this is a renewed respect for traditional bourgeois culture, or at least that aspect of it which inculcated people to save and not consume, i.e. have a long time preference for consumption. It seems those silly old Protestant misers had a point after all. One can even find it in the math, if one knows where to look.

Note

1. <http://links.jstor.org/sici?sici=0022-3808%28197005%2F06%2978%3A3%3C456%3AFPEIAD%3E2.0.CO%3B2-N>

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Gross National Happiness

Rajni Bakshi (India)

The tiny Himalayan kingdom of Bhutan is an unlikely place for the birth of an international trend. Yet Bhutan is emerging as a global leader in the promotion of 'Gross National Happiness', a concept it first embraced three decades ago and which is now being fleshed out by a wide range of professionals and agencies across the world.

The term Gross National Happiness (GNH) was coined by Bhutan's King Jigme Singye Wangchuck when he ascended the throne in 1972. It signaled his commitment to building an economy that would subserve Bhutan's unique culture permeated by Buddhist spiritual values.

Today, the concept of GNH resonates with a wide range of initiatives, across the world, to define prosperity in more holistic terms and to measure actual well-being rather than consumption. By contrast the conventional concept of Gross National Product (GNP) measures only the sum total of material production and exchange in any country. Thus an international conference on Operationalizing GNH, hosted by the Bhutan Government in the capital city of Thimphu from February 18th to 22nd, 2003, attracted scholars and experts from 20 countries.

The evolving concept of GNH could prove a significant advancement in economic theory. It endeavors to enhance the sophistication of human systems by emulating the infinitely greater sophistication of nature. Just what would it mean for economic structures to emulate nature? At present individual companies and entire countries are compelled to keep growing indefinitely. The only parallel for this in the natural world are cancer cells, which by growing exponentially destroy the host body and themselves. Today it is widely acknowledged that the human economy cannot keep growing at the cost of its habitat. Yet even after two decades of expanding environmental regulation we are still losing the race to save the planet. This is partly because production systems and consumption patterns are out of synch with the carrying capacity of the planet. The pressure for ever higher GNP is merely one manifestation of this.

The concept of GNH is seen as one of several ways in which these imbalances might be rectified. The international gathering at Thimphu reflected a consensus that Gross National 'Product' would still need to be measured and given due importance but in ways that are actually conducive to GNH. So far there has been a tendency to treat GNH as merely the well-intentioned slogan of a land-locked developing country ruled by an enlightened monarch. The obvious challenges of attempting to define or measure happiness have also helped to keep the concept of GNH on the outer fringes of serious discourse.

However, as the conference in Thimphu showed, basic happiness can be measured since it pertains to quality of nutrition, housing, education, health care and community life. Thus, GNH may indeed be ready to come of age. The concept is essential for anyone working on development. Three major factors seem to be responsible for the expanding credibility of GNH. One, there is wider awareness that GNP is a one-dimensional and thus misleading measure. Two, a wide range of indices have been devised which offer a more realistic assessment of even material prosperity. Three, there is growing pressure for an infusion of moral and cultural values into the core of economic policy. GNP was never intended to be a measure of actual well-being. It is the artifact of a time when it was assumed that if there are more goods in circulation general welfare is ensured. As extensive documentation has shown, this is not always the case. Moreover, attention has also been drawn to dire side effects of the GNP driven model of economic growth in many societies, including the USA with its multiple social crises and rising sales of anti-depressants. Such critiques are not new. Back in 1968 Robert Kennedy lamented that the GNP also grows because of the sales of rifles and knives and "...television programs which glorify violence in order to sell toys to our children. ...(it) does not allow for the health of our

children, the quality of their education, or the joy of their play."

Since 1995 a San Francisco based think-tank called Redefining Progress has been annually assessing the American economy with an alternative yardstick called the Genuine Progress Indicators (GPI) which presents a relatively grim picture of American society compared to the GDP, as GNP is called in the USA. The GPI index gets closer to the reality of people's lives in the following ways. It includes the household and volunteer economy which is completely ignored by the GNP. It counts as a 'loss' all money spent on either preventing crime or repairing damage caused by it. Similarly all money spent on water filters, air-purification and other ways of coping with environmental degradation is counted as a 'loss'. Likewise money that goes into circulation because of car crashes and divorces is counted as a loss. The GPI also takes into account the extent to which the whole population shared in increasing material abundance.

The GPI is just one among several endeavors to evolve new indicators which measure actual conditions of human well being. But although countries as diverse as Costa Rica, Canada, Iceland, Netherlands, Sri Lanka and Mongolia have established well-being indicators, the hegemony of the GNP measure remains in place. This is why Bhutan's insistence on the primacy of GNH over GNP inspires people far beyond its borders. Their commitment to GNH has meant that moral and ethical values are placed at the core of their economic strategies for ensuring better food, housing and health for their population of just over 710,000 people. It has allowed them to both expand their network of roads and increase their forest cover. In most other developing countries the arrival of roads is inevitably followed by deforestation. This is not to suggest that all is well in the Kingdom of Bhutan or that they are able to fully live up to their GNH commitment. Yet their achievements are notable.

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