MEME WARS

THE CREATIVE DESTRUCTION OF NEOCLASSICAL ECONOMICS

KALLE LASN
ADBUSTERS

A STUDENT GUIDE

MEME WARS

The Creative Destruction of Neoclassical Economics

Kalle Lasn with Adbusters

The Student Guide
by Danny Myers

INTRODUCTION

On first inspection, Kalle Lasn's *Meme Wars* is a breath of fresh air, not only in terms of design but also in approach. It made me feel as if I had made a real discovery, and had found a book that might make students question what they were being taught in college by economists.

The book came out in November 2012, by which time I had been lecturing economics to undergrad and postgrad students for the better part of 25 years. For much of that time, however, I had been frustrated by the accepting and respectful ways that groups approached their studies; wanting to learn, often more or less by rote, the so called "accepted wisdoms" of the subject. Surely one of the hallmarks of studying at university is meant to be the development of critical thinking; indeed most assessment criteria expect a good student to demonstrate such talent.

So it was really a case of good fortune when I stumbled upon Kalle Lasn's heartfelt appeal to college students of economics to put down their mainstream textbooks and "challenge" and "question" and even "revolt" against the neoclassical curriculum that they are being taught. At last there was some hope.

Lasn's book is a radical call to action. He recommends that students "Disrupt lectures, walk en masse out of classes, post a never-ending stream of posters and provocations in the corridors, nail manifestos to professors' doors. Ridicule their theories in campus newspapers and on campus radio. [. . .] Organize teach-ins and, in front of campus-wide audiences, demand to know how they factor forests, fish, climate change and ecosystem collapse into their macroeconomic models."

In short, Lasn makes a direct attack on orthodox economists; there is no pussy-footing around, his overall aim is to create a collective moment of truth when it becomes obvious that the professors in charge of educating the next generation of economic policy makers are unable to answer even the most fundamental questions . . . to make sure that we all realize, that the lunatics have been left in charge of the asylum.

I have always held great respect for those who have the creative power to prompt change, and especially when their arguments are informed by an understanding of a discipline that was not their major in college. But in the case of Kalle Lasn, this respect is more than simply twofold. The 'Occupy movement' that he inspired in 2011 has already touched the lives of millions of people across the world, and the related publication of *Meme Wars* in 2012 further undermines the orthodox neoclassical approach to economics; potentially, it could help unsettle the general public's respect of the subject. In other words, the Occupy movement and the publication of *Meme Wars* are complementary developments; prompted by the energy and ideas of Kalle Lasn, they go hand in hand. This short guide should help you realize the potential of the work.

USING THIS GUIDE

The guide is an associated reader to support Lasn's book. It provides economics students and lecturers the opportunity to really study Kalle Lasn's underlying message, and to recognize that *Meme Wars* has far more importance than its coffee table scrapbook style might at first glance imply.

In military terms, the book's aims and objectives could be summarized as follows:

- To declare war on the established tradition, represented by mainstream economics' teaching across the globe.
- To bombard professional academic staff with questions that highlight the inadequacy of the subject methodology and the quality of its explanations.
- To secure a new camp, targeted at accelerating a shift to a new economics paradigm; one that considers a broader, more realistic remit than the narrowly referenced neoclassical approach; a paradigm that incorporates other aspects of our mental and physical environment. What Lasn refers to as psychonomics and bionomics.

Initially Lasn's work was prompted by the financial crisis that commenced in 2007, and *Meme Wars* raises a number of questions that students are encouraged to ask their professors; the main ones are reiterated at the close of the introductory section to each of the chapters of this guide. Although the questions may at first glance appear radical and students might feel that they are being cheeky, or jeopardizing their chances of exam success by exploring them, this is completely unfounded. (In fact, the exact opposite is the case, as to demonstrate the ability to challenge a theory or methodology requires a rigorous understanding of what is going on in the first place.) This guide is designed to encourage students to think more critically about the economics curriculum that is taught at universities today, and this is an approach that should be fostered at both undergrad and postgrad level, indeed to think critically and raise questions are qualities that academics should welcome. So hopefully the guide will help you find the confidence to develop a new voice that questions the neoclassical authority that dominates academic departments of economics. In other words, the aim is to give you the opportunity to challenge all those economic ideas that have never quite stacked up such as the pursuit of continual economic growth, the acceptance of huge disparities between the rich and the poor, the credit-driven societies that dominate the so-called rich world, the irritating hypothetical choice between two goods, such as hot dogs and pizza, that economics lecturers favor although it seems a rather limited diet. So the approach advocated here is a brave one to adopt, but remember any honest professional academic who is responsible for assessing your understanding will take pride in the *informed* questions that you begin to ask. This text should give students the context and confidence to do just that!

Following each introduction are two further sections comprising *Guidance Notes* and a section that questions the possible *death of neoclassical economics*. Studied together, these sections form the largest part of the three chapters presented in the guide. They are designed to flesh out Lasn's text by evaluating the case for the defense and examining the vulnerability of the current neoclassical position. In other words, the objective of the two main sections is to review the opportunities for attack; identifying positions of weakness and uncovering small radical camps where support might easily be mustered.

Each chapter closes with a *reflective summary*, suggesting follow-up study and ideas for discussion. The overall aim is to prompt a close scrutiny of the content of Kalle Lasn's 'textbook' and the detailed commentary presented in this guide.

As far as possible, the chapter titles used in this guide are derived from the framework that Lasn refers to as the *Real World Curriculum*. In other words, as a way of working around the problem that *Meme Wars* has no page numbers, the table of contents titled *Real World Curriculum* that divides the book into ten sections provides a road map for the basic structure of this guide. But first of all, we need to set the scene by clarifying the notion of a meme war, identifying the repute and significance of neoclassical economics, and outlining the importance of the Occupy movement.

MEMES

Slightly surprisingly, Kalle Lasn does not commence by discussing the meaning and origin of a *meme*, presumably because this digression might distort and complicate his main straightforward argument. But for this guide to put the work into a context, we must at least try to explain the origins and significance of Lasn's title: *Meme Wars.*

The notion of memes is usually attributed to *The Selfish Gene,* the seminal work of Richard Dawkins. He first outlined the meaning of the concept in the closing chapter (*Memes: the new replicators*). The book, beautifully written, was published in 1976 and explores in a clear and transparent way the question of evolution. It has also been translated into twenty languages and sold more than a million copies. But unfortunately, Dawkins' closing remarks about memes are not the strongest part of the text. There is some debate about what he was precisely trying to say, although he draws several analogies to suggest that memes are like genes.

The term 'meme' (pronounced meem to rhyme with cream) is meant to help us understand how a belief system can replicate itself and transmit throughout a culture. Adopting the gene-centered view, it follows that the more two individuals are genetically related, the more sense (at the level of the genes) it makes for them to behave selflessly with each other. Therefore, the concept is especially good at explaining many forms of shared information and values.

So, in effect, a meme acts as a unit for carrying cultural ideas. It may help to think of it as Dawkins did as being related to memory, or cultural transmission; in other words, a "meme" is a term used to describe any particular facet of culture, tradition, or shared ideas. Memes are analogous to genes in that they self-replicate, mutate, and respond to selective pressure. They have been described as an idea that behaves like a virus that moves through a population, taking hold in each person it infects culturally. Dawkins himself tried to clarify the concept by suggesting that "a meme should be regarded as a unit of information residing in the brain" (Dawkins, 1983, p.109).

The established neoclassical approach in economics represents a series of related ideas that are transmitted by academics working in universities to populations of enrolled students across the globe. This current orthodoxy presents markets as good and government intervention as bad. Similarly, consumerism and profits are good and taxes and regulations are bad. And these are the type of mind-sets that are challenged by Kalle Lasn's book.

This worldview doesn't just propagate through academia. "People's capitalism" became a slogan popularized in the mid-1950s as another name for the American economic system. It was endorsed by President Eisenhower for use by the United States Information Agency to trumpet worldwide the successful aspects of the American economy during the Cold War. The propagandists depicted the United States as a classless society of prospering workers as opposed to societies of "slaves" in the Soviet Union and China.

In many ways the notion of memes builds on the work of Thomas Kuhn from the early 1960s. In *The Structure of Scientific Revolutions* (1962) Kuhn described the nature of "paradigm shifts," or to put it plainly, how new ideas emerge and get accepted. According to his analysis, the acceptance of new paradigms (ideas) is almost always nasty, messy, and a dirty affair, very much like political revolutions. They unfold like vindictive putsches. The old guard protects its turf jealously. The dissenters are ignored, stonewalled, refused publication and tenure, ostracized and obstructed in every way. And so knowledge takes a long time to evolve. The set way of working is hard to break. This is why Kalle Lasn is calling vociferously for a "meme war": a battle of ideas to shift Western society away from consumer capitalism.

NEOCLASSICAL ECONOMICS

Kalle Lasn has managed to launch a rigorous attack against the neoclassical approach; an approach that represents the current paradigm of mainstream academics teaching economics. He is certainly not the first to raise questions concerning the conventional approach, but he is probably the first to do so within the covers of a coffee table book built around graphic images from the Adbusters media foundation.

The neoclassical approach to economics is built on the foundations of classical economists like Adam Smith and David Ricardo, and so it follows that there continues to be a strong belief in free markets and in unregulated economies, which will generally steer towards equilibrium. But the really extraordinary thing about twenty-first century neoclassical economics is how it continues to be interpreted, analyzed, and understood using nineteenth-century theories. In other words, twenty-first century "mainstream" economists are locked in a time warp and have a necrological impulse to look for guidance and inspiration in a 150-year-old cemetery.

As a consequence, economics textbooks tend to be relatively well established and old fashioned. Little tends to change from one edition to the next. And I am speaking from experience; as part of the authoring team of a mainstream textbook (Maunder et al. 1987, 1991, 1995 & 2000) at various stages, I had responsibility for chapters concerning what economics is all about; the role of government; macroeconomic objectives and indicators; environmental issues; national income accounting; marginal analysis and the theory of the firm; pricing and output decisions in perfect competition; pricing and output decisions in monopoly; demand and supply elasticity; consumer choice; competition and industrial policies; and economic growth. In most cases, each new edition (1991, 1995, and 2000) involved little more than revising data and identifying new problems to confirm that the market concerned is imperfect or non-existent. As a result, the most contentious issues to deal with were largely about whether the market could be relied upon to organize the so-called commanding heights of an economy, such as the supply of water and electricity, rail and air services, health care, education, and housing. Today's equivalent would involve adding questions relating to the logic of allowing markets the responsibility of allocating the supply of credit across an economy.

The leading university texts, Paul Samuelson's *Economics: an introductory analysis* and Gregory Mankiw's *Principles of Economics,* adopt a similar approach but have far larger markets and impacts. Samuelson has been in print since 1948 and is now in its nineteenth edition. For many years it was the leading economics text, and has been translated into 41 languages. It has sold more than four million copies. (*Economics,* as it is now titled, was written entirely by Samuelson until 1985, but newer editions have been revised by William Nordhaus.) The modern equivalent is Mankiw's text. This has been in print since 1997, is currently in its sixth edition, and is available in twenty languages. This title is currently selling more than 100,000 copies per year.

The worry from Kalle Lasn's perspective is the power and influence that such authors wield from their ivory towers. He takes Gregory Mankiw, Professor of Economics at Harvard University, as his prize target. The logic being that Harvard graduates play major roles in the financial institutions and in shaping public policy around the world; if Harvard fails to equip its students with a broad and critical understanding of economics, their actions are likely to harm the global financial system. The last six years of economic turmoil suggest that there might be an element of truth in this notion.

The recurring point emphasized throughout *Meme Wars* is that the textbook world of neoclassical economics is a world where the magic of markets, private enterprise, and property rights work wonders. In this world, standards of living rise constantly, people are in better health, they live longer, and all seem happier. In short, the world into which tens of thousands of economics students graduate each year may appear like a utopian beautiful world . . . but it does not exist!

THE OCCUPY MOVEMENT

As indicated above, about a year before the publication of *Meme Wars*, Kalle Lasn played a major part in setting up the Occupy movement in Wall Street, New York (which started on September 17, 2011). The movement quickly spread to other European cities and beyond, with something in the region of three million protesters taking to the streets across 1,495 cities in 93 countries. The ideas behind this worldwide movement should not be allowed to pass lightly. In fact, a prevailing aim of this guide is to prompt a belief that something could genuinely emerge from this movement; the actions of people who are no longer satisfied with economic life and the struggle that capitalism involves could invoke change.

In the first instance, the primary goal of 'Occupy' was to challenge the economic structure of society and make power relations fairer. To achieve a reality where people matter more than money and markets work towards more equitable outcomes. Although local groups often have different foci, the movement's prime concerns are the claims that large corporations and the global financial system control the world in a way that disproportionately benefits a minority, undermining democracy and making societies unstable. Indeed the Occupy movement commonly uses the slogan *we are the 99 percent* to emphasize the concentration of wealth among the top 1 percent of income earners compared to the other 99 percent; the phrase reflects a belief that the "99 percent" are paying for the inadequacy of a free market system. The top 1 percent of income earners in America nearly tripled their after-tax income over the last thirty years according to a Congressional Budget Office report, and the richest 1 percent recently earned 19 percent of all income (CBO, 2011). In second place in a league table of countries with the greatest inequality is the UK, and the data suggest that the richest 1 percent take 15 percent of all income (IFS, 2012). Oxfam (an NGO for overseas development) made the point most vividly when it highlighted the banal fact that the wealth of the top one hundred people in the world (which was calculated in 2012 as $1.9 trillion) could pay for the world's poor several times over. Interestingly, $1.9 trillion is just about the same as the entire annual output of the current UK economy!

The problem is that these huge income imbalances (which are a feature of all OECD economies) is not just a result of good fortune, it is the result of neoclassical economic theory based on free market principles that have broadly supported a range of economic policies that theoretically should incentivize *everyone* to become more prosperous. In practice, however, in the last decades the very rich have become more prosperous and the rest of society has, at best, stood still. In short, government policies have favored the rich. As evidence, review legislation that has been passed since the 1980s has reduced welfare payments, subjected the rich to less tax, sold off state assets via privatization schemes, and generally deregulated labor, and reduced the power of collective bargaining. It is policies such as these that have enabled the top 1 percent to become so excessively rich and squeezed everyone else. Clearly this is not what the theory predicted, so in effect, "the 99 percent" are now paying for the mistakes of the academic economic community.

REFLECTIVE SUMMARY

The purpose of these sections is to reiterate the important points discussed in the chapter, raise some final questions, and suggest follow-up studies in the form of readings and video clips. For example, in reviewing this introduction it should be clear that the crux of Lasn's argument is to present the case against neoclassical economics and secure a change. Obviously this raises immediate questions about the nature of the course you are following and the level of indoctrination that you sense is at play.

The problem is that although Lasn's proposed route is paved with good intentions, it is currently poorly understood and not yet accepted. This is not surprising; however, this will change as attitudes towards economic growth, credit, money, and our expectations of trying to live in a truly sustainable way are all currently being brought into question. Lasn's book is part of a broader debate on these issues, and there have been several titles published during the last five years that review these problems; several of them are listed in the recommended reading relating to this introduction. In general terms, these titles are a response to the financial and economic crisis and they attempt to address what went wrong and what should be done. Most of them commence by making the point that the collapse is made even starker by the fact that it followed a decade of relatively calm economic cycles that seemed to be on a steady long term upward growth path—it was as if there were no more boom and bust economics. I recommend that you try and read at least one of these new titles; they are identified with an asterisk in the list of references. For example, *see* Magnuson (2013) where he suggests that "growth for growth's sake is a systemic condition driven by the financial sector's need to maximize returns to their investors, which creates a widespread preoccupation with sales and market expansion. It has become deeply ingrained in American culture where there is a widespread expectation that financial investments will keep growing forever. For this to happen, the production and consumption of goods must grow forever as well, but it cannot because the carrying capacity of the planet won't allow it."

Mainstream economists, however, appear to be in denial of this reality and have fooled themselves and those who study their work to believing a certain fiction. The basis of the neoclassical story line is that we can not only pursue both growth and sustainability, but the benefits of both can be shared among everyone equitably. This may be referred to as a "3M approach" based on—modeling, maximization, and money. So if we are serious about ecological permanence and social equity, then the 3M approach needs a sober and critical examination. The Occupy movement was primarily concerned with protesting what's wrong, it is now important to fight for an alternative.

In this guide we shall present a number of options regarding "going green," "going local," "downsizing," and adopting a "behaviorist approach" to the study of economic phenomenon. In passing you will be introduced to the work of optimistic pioneers, mavericks, and heterodox economists who collectively have not yet managed to move the economic approach towards any new measure of ecological permanence or equity; ironically, this may be because the new ideas originate in conventional institutions and they do not yet have the support of the student body or their future employers. To make the transformation towards a new approach will require a real change and a clean break from business as usual.

This guide recognizes that the students' role in all of this is not easy. It requires them to somehow demand a curriculum that makes them fit for purpose, in that they can manage and manipulate empirical data to interpret actual events, and to assure that they are employable beyond the walls of academia; to make sure that they are "oven-ready" so to speak, when they are facing the heat and expectations of their first job in the real world.

As Diane Coyle (2012: 1) makes explicit in her review of economics teaching after the crisis: "the gap between the interesting questions or real-world problems and the workhorse economics being taught to students at all levels has become a chasm since the start of the crisis," and in her estimation the missing ingredients are:

- greater awareness of history or real-world context,
- practical knowledge of data handling,
- the ability to communicate technical results to non-economists,
- understanding of the limitations of modeling or of economic methodology,
- a more pluralistic approach to teaching the subject, and
- a combination of inductive and deductive reasoning.

It is important that students grasp this message before they graduate and find the courage, and diplomacy, to ask the important questions. So to get us on our way to commence battle and possibly raise a few eyebrows, it might be interesting to close this section by carefully interrogating the so-called 10 principles of economics that Greg Mankiw uses in Chapter 1 of his textbook to introduce what economics is all about; a list he sweetly (or perhaps naively) calls "a preview of coming attractions" . . .

According to Mankiw, the ten most important economic principles of the neoclassical approach are as follows:

1. People face trade-offs.
2. The cost of something is what you give up to get it.
3. Rational people think at the margin.
4. People respond to incentives.

5. Trade can make everyone better off.
6. Markets are usually a good way to organize economic activity.
7. Governments can sometimes improve market outcomes.
8. A country's standard of living depends on its ability to produce goods and services.
9. Prices rise when the government prints too much money.
10. Society faces a short-run trade-off between inflation and unemployment.

According to Yoram Bauman's (2003 and 2007) *Translation*, the first seven of these principles are clearly the matter of microeconomics, or as he sarcastically expresses it: "concerns economists who are wrong about specific things." For example, take the third proposition that rational people think at the margin. This is clearly arguable. For example, most people who buy oranges at the grocery store think like this: "Hmmm, oranges are $.25 each. I think I'll buy half a dozen." They do not think: "Hmmm, oranges are $.25 each. I'm going to buy one, because my marginal value exceeds the market price. Now I'm going to buy a second one, because my marginal value still exceeds the market price . . ." We know most people don't think like this because most people don't fill their shopping baskets one orange at a time! This assumed behaviour pattern simply makes people appear stupid . . .

The last three principles are about macroeconomists whom Bauman (2003 and 2007) regards as economists "who are wrong about things in general." To qualify this, he jibes that economists have successfully predicted 9 of the last 5 recessions! You are strongly recommended to watch the 5 minute YouTube clip (Bauman 2007) and read the related paper (Bauman 2003) for a more perceptive and investigative comment; both of these items cover the same ground but they will encourage the uninitiated with an invaluable glimpse of the economic challenge that we have set.

The challenge can be expressed in many ways, but in a nutshell it seeks to stop economic policy makers obsessing about fiscal health and start obsessing about cultural and ecological health; it is a challenge set to move us to new mindsets and horizons. Remember, Kalle and I are relying on you to be the change, so make sure that you use the guide wisely and enjoy it . . .

REFS AND RECOMMENDATIONS

Bauman, Y (2003) Mankiw's Ten Principles of Economics, Translated — *Annals of Improbable Research Volume* 9: issue 2.

Bauman, Y (2007) Mankiw's *Principles of Economics, Translated* — U-tube clip (first broadcast on the 16th Feb. 2007).

Bootle, R (2009) *The Trouble With Markets: Saving Capitalism From Itself*. Nicholas Brealey: London and Boston*

CBO—Congressional Budget Office—(2011) *Trends in the Distribution of Household Income between 1979 and 2007*. The Congress of the United States: Congressional Budget Office (publication number 4031).

Cassidy, J (2010) *How Markets Fail: the logic of economic calamities*. Penguin: London*

Coyle, D—Editor—(2012) *What's the Use of Economics? Teaching the Dismal Science After the Crisis.* London Publishing Partnership

Dawkins, R (1976) *The Selfish Gene,* Oxford University Press: Oxford.

Dawkins, R. (1983) *The Extended Phenotype* Oxford University Press: Oxford.

Krugan, P (2008) *The Return of Depression Economics and the Crisis of 2008*. Penguin Books: London and New York.*

IFS—Institute of Fiscal Studies—(2012) *Living standards, poverty and inequality in the UK: 2012*. The Institute for Fiscal Studies: London (IFS Commentary C124).

Magnuson, J (2013) *The Approaching Great Transformation: toward a livable post carbon economy*. Seven Stories Press: New York*

Mason, P (2009) *Meltdown: The End of the Age of Greed*. Verso: London and New York*

Maunder, P. Myers, D. Wall, N. and Leroy Miller, R. (1987, 1991, 1995 & 2000) *Economics Explained*, Harper Collins: London

Preston, R (2008) *Who Runs Britain?* Hodder & Stoughton: London*

Stiglitz, J (2010) *Freefall: free markets and the sinking of the global economy*, Penguin Books: London and New York.*

CHAPTER 1
BATTLE FOR THE SOUL OF ECONOMICS

The first substantive section of *Meme Wars* begins with a historical overview of how we got into the current financial mess, starting with a retrospective of the development of trade from the early days of bartering, gift giving, and hunting to the so-called sophisticated days of high finance, mega-banking, and automated capitalism. This led to a 'new world,' where *securitization* ruled the day as investment banks set up special purpose vehicles (SPVs), such as derivatives, collateral loan obligations, credit default swaps, certificates of deposit (CD) or bonds, to move funds around.

In theory, this 'new world' allowed everyone to get what they wanted from the financial system: the home owner and credit card holder got a loan and the investment bank had a way to package up their risky debts and sell them for a fee as they unloaded the debt onto someone else. Mortgage-backed securities and their equivalents became increasingly popular from 1980 onwards. Banks became places that no longer 'originated and held' debt, as the new instruments meant that they could sell off loans and pocket a tidy profit rather than hold the loans until maturity and run the risk of having them go bad later. Ironically the thinking was that distributing the loans to pension funds, insurance companies, and institutional investors would lessen the risk of a banking crisis. To paraphrase Roubini and Mihm (2010) *'originate and distribute'* replaced *'originate and hold'*; and as a consequence banks no longer had to be as diligent in monitoring the underlying risk of loans and mortgages. In the new world of securitization bad debts could be quickly passed down the line like a hot potato.

As Greg Smith (2012), a former executive director at Goldman Sachs (in charge of the firm's US equity derivatives business in Europe, the Middle East and Africa) announced in a letter of resignation that he managed to get published in the *New York Times*: "I attend derivatives sales meetings where not one single minute is spent asking questions about how we can help clients. It's purely about how we can make the most possible money off of them. If you were an alien from Mars and sat in on one of these meetings, you would believe that a client's success or progress was not part of the thought process at all . . . "

Understandably, this letter created quite a stir in the investment banking industry, as not only is this type of whistle blowing critique incredibly unusual, but it also raised some challenging questions about Goldman Sachs—the company and its equivalents—the financial markets and capitalism in general.

QUESTIONS FOR YOUR PROFESSOR:

- What should the role of finance and banks be in society?
- How come the financial meltdown of 2008 caught so many academic economists shaking their heads in disbelief? (How could so many economists get it so wrong?)

GUIDANCE NOTES

Problems relating to money, credit, and the general financial system are an excellent place to commence battle; and the questions raised in the text and reiterated above appear pertinent and perceptive—and at this point in time, they urgently need to be asked, especially as traditional neoclassical economics courses have developed a general tendency to largely ignore this problematic area. The root of the problem lies in the fact that two types of financial transactions have emerged: those that relate to 'real economic activity' and those that relate 'purely to the financial system' *per se*.

An outcome of encouraging financial markets to deregulate—a process that started in the 1980s—has been the development of financial instruments that solely benefit financiers and which greatly outstrip the transactions and instruments that support real economic activity. In the post crisis jargon, the 'investment' and 'retail' arms of the banking industry have become blurred; the 'casino and gaming' element has become disproportionate and riskier relative to the 'bread and butter' work that banks traditionally undertook. At its peak in 2008 the market in speculative transactions totaled more than a trillion dollars a day—50 times greater than the value of all real commercial trade exchanges. The problem, therefore, was that bankers had become more concerned with moving money to transact *financial speculative instruments* rather than conventional *real trade transactions*. The presumed solution was to separate the two functions and impose greater regulation.

As a result of this dual system, society at all levels—corporate, government, and personal—had been allowed to live off debt for many years. Debts that can't and won't be paid! The bailout of major Eurozone economies such as Spain, Ireland, Greece, Portugal, Cyprus, and Italy, have all paid testament, by agreeing terms for bad debts (such as mortgages) to be taken onto the balance sheets of the European Central Bank. Whereas in the USA and the United Kingdom, institutional terms have been imposed and tax payers' funds used, to restructure and refinance the banking sectors. The only exceptions to these broadly based government interventions to the banking crisis were experienced by some of the Icelandic banks and Lehman Brothers (formerly the 4th largest investment bank in the USA) who were allowed to collapse under market pressure. So in global terms, regardless of neoclassical advice, in the majority of cases governments did not allow crippled banks to fail and some would argue that this regulatory, interventionist type of approach represents the first nail in the lid of the neoclassical coffin.

To paraphrase some of the extract from Professor Michael Hudson (who contributes a remarkably succinct and perceptive historical overview of debt since Renaissance times to this section of Lasn's text), international finance has turned into a new mode of warfare. Its objective is the same as military conquest in times past: to appropriate land, mineral resources, and communal infrastructure, and to extract tribute. In response, democracies are demanding referendums over whether to pay creditors by selling off assets in the public domain and raising taxes. The alternative is to write down debts or even annul them, and to reassert regulatory control over the financial sector. It is as if by some weird twist of fate that the financial sector has gained sufficient influence to use such emergencies as an opportunity to convince governments that the economy will collapse if they do not "save the banks."

The death of neoclassical economics!?

Clearly the neoclassical approach needs attention and revision, but this is going to prove truly difficult from within the mainstream. In the public arena academics are responding from an 'egg on their face position,' as they appear too embarrassed to accept that things have gone completely wrong. There follows, several high profile statements, from some of the leading lights of the economics profession to justify their current approach. (Note these respective professors have between them held tenure at the world's most respected universities including Oxford, LSE, Harvard, Yale, Princeton, Stanford, Berkeley, and Chicago; have advised governments on both sides of the pond, and with one exception they have all been awarded the distinction of a Nobel laureate prize in Economics for their contribution to economic science.)

We begin by considering the defense of the author of the leading introductory economics textbook, Professor Greg Mankiw. In 2009 Mankiw wrote a short article for the *New York Times* where he suggested that in the light of the financial crisis, introductory courses needed four small tweaks: the role of financial institutions should "become more prominent in the classroom," likewise for "the effects of leverage," ditto again for the "tools of monetary policy" and finally, students must be taught that economic events like the "global financial collapse" cannot be foreseen.

Professor Robert Lucas (2009), in an article for *The Economist,* is even more intransigent. He sneers at people who have seized the crisis as an opportunity to suggest that the neoclassical approach has failed and seriously questions what the public actually expects of specialists in finance and economics. His basic premise is based upon lessons from the efficient market hypothesis. As he states in *The Economist* (2009): "One thing we are not going to have, now or ever, is a set of models that forecasts sudden falls in the value of financial assets, like the declines that followed the failure of the Lehman Brothers in September. This is nothing new. It has been known for more than 40 years and is one of the main implications of the efficient market hypothesis (EMH), which states that the price of a financial asset reflects all relevant, generally available information. If an economist had a formula that could reliably forecast crises a week in advance, say, then that formula would become part of generally available information and prices would fall a week earlier." In other words, Professor Lucas is seeking to highlight that the economic world, far more than the physical world, is influenced by our beliefs about it and this information is generally signaled through market prices.

In recent years Professor Paul Krugman (also a mainstream textbook author) has been the most strident and publicly vocal critic of the state of economics. So when his long article appeared in the color supplement of the *New York Times* with the promising title "How Did Economists Get It So Wrong?" one might have expected to find recommendations for strong and even radical reform of the economics profession. But after nearly 7,000 words of bashing his perennial enemies—Friedman, Lucas, and Prescott—Krugman concludes with only two short paragraphs addressed to reform, intriguingly they read as follows:

"So here's what I think economists have to do. First, they have to face the inconvenient reality that financial markets fall far short of perfection, that they are subject to extraordinary delusions and the madness of crowds. Second, they have to admit—and this will be very hard for the people who giggled and whispered over Keynes—that Keynesian economics remains the best framework we have for making sense of recessions and depressions. Third, they'll have to do their best to incorporate the realities of finance into macroeconomics.

"Many economists will find these changes deeply disturbing. It will be a long time, if ever, before the new, more realistic approaches to finance and macroeconomics offer the same kind of clarity, completeness and sheer beauty that characterizes the full neoclassical approach. To some economists that will be a reason to cling to neoclassicism, despite its utter failure to make sense of the greatest economic crisis in three generations."

Again this is hardly radical stuff. Krugman has pushed for far stronger reform measures at times when economics enjoyed broad uncritical support among the intelligentsia. One senses that like maverick members of political parties at election time, Krugman is showing his loyalty to the mainstream at a time when it is most needed.

Finally we consider an article in the British press authored by Joseph Stiglitz and George Akerlof in 2009. They too adopt a relatively moderate tone in the sense that they do not seek to promote a revolution in economics but merely extend the existing boundaries slightly. They commence by acknowledging the "great diversity of ideas within the economics profession, paying particular attention to those that highlight how markets are not necessarily either efficient or stable, or that the economy, and our society, is not well described by the standard models of competitive equilibrium used by a majority of economists." As a student you need to note that Akerlof and Stiglitz's main claim to fame, and the basis of their joint nomination for the prize of the Nobel Laureate in 2001, was for their work on asymmetric information and its effect on economic behavior. They both have made a career out of emphasizing that "whenever markets are incomplete and/or information is imperfect (which is true in virtually all economies), they cannot be efficient. As they expressed it in the Guardian article (2009): "Modern behavioral economics shows that even if markets are competitive, they are almost never efficient when information is imperfect or asymmetric (some people know something that others do not, as in the recent financial debacle)." Stiglitz (2013) uses this line of thought to develop another hobbyhorse that explains why economic systems work far better for the top 1 percent than the bottom 99 percent.

The Stiglitz and Akerlof (2009) line of argument leads to the conclusion that the pervasiveness of market failures do not necessarily warrant the state intervening broadly in the economy, though they make it clear that the optimal range of government recommendable interventions is definitely much larger than the traditional 'market failure' school recognizes. As they express it in the Guardian (2009): "Just as the crisis has reinvigorated thinking about the need for regulation, so it has also given new impetus to the exploration of alternative strands of thought that would provide better insights into how our complex economic system functions—and perhaps also to the search for policies that might avert a recurrence of the recent calamity."

To summarize these mainstream economists sound radical but in effect they show little sign of giving ground, they are simply trying to fix the problems by tweaking from within. In very general terms they appear to accept a need to integrate 'financial flows' and 'real flows' into economic analysis so that the banking sector can be effectively understood and modeled as part of the macroeconomic system. At a more subtle level they also appear to recognize a need to transfer the focus of market analysis from efficient to inefficient, equilibrium to disequilibrium and rational to irrational. In other words, when it comes to understanding the problem of financial crisis and recessions, economists need to abandon the neat assumption that everyone is rational and all markets work perfectly. As a consequence, the vision that emerges as the profession rethinks its foundations is not all that clear; but you can rest assured that it certainly won't be neat and orchestrated; in fact, the best that can currently be hoped for is that a revised approach will at least provide some way forward . . .

So left to their own devices, the established profession is unlikely to free economics from the grip of the neoclassical paradigm. There is certainly nothing in the above from the great and the good of economics professorships to suggest that the curriculum is undergoing what Lasn would regard as a radical spring clean. Indeed it seems fair to conclude that the mainstream status quo in one form or another could quite easily continue, unless of course it is called to defend itself from challenging customers—students looking to understand the economy, the world of work, and the related policy fields in today's world.

REFLECTIVE SUMMARY

The complete failure of mainstream academic economists to anticipate the financial crisis has raised many questions, and the general profession now appears to be under some sort of public attack, spearheaded by the media. Indeed there were only a handful of economists, working directly as financial traders, or academics seconded to institutional positions for a sabbatical period at central banks or related international organizations, that had the wherewithal to see the writing on the wall and predict the crises before it happened. In one sense, many of them had the daily benefit of working outside the neoclassical domain of academia. The press and related literature tend to attribute this small elite group with some kind of *exceptional talent* in forecasting the financial crisis before it happened (see summary in Table 1 to follow up the names of this small group and their ideas).

THEY SAW IT COMING

Researcher	Country	Role	Forecast	Nature of Forecast
Raguram Rajan	USA	Professor of Finance University of Chicago. Chief economist at IMF (2005).	2005	The Ways bankers and traders are being compensated would encourage them to take on too much risk . . . making the global financial system vulnerable to a severe crisis
William White	Canada	Chief economist at the Bank for International Settlements	2005	Warned of the systemic risks of asset and credit bubbles
Fred Harrison	UK	Director of the Land Research Trust	2005	Identified land speculation as a primary agent of instability and forecast that the housing bubble would bust in the UK at the end of 2007 or early 2008.
Dear Baker	USA	Co-director, Center for Economic and Policy Research	2005	From 2002 onward Baker predicted that the wealth effect created by the housing bubble would lead to a recession. In fact, he was so convinced that the proce trend would reverse theat he sold his house in 2004 to take advantage of a 178% appreciate in price—before it was too late.
Michael Hudson	USA	Professor, University of Missouri	2006	He warned that the 'growth of net worth through capital gains would come to a bitter end. To paraphrase his forecast: the bubble will burst . . . and rising debt-service payments will divert income from consumer spending and these factors will further shrink the "real" economy.

Researcher	Country	Role	Forecast	Nature of Forecast
Stephen Keen, Australia	Australia	Associate Professor, University of Western Sydney	2006	The current rise in debt will lead the economy into a recession; see his explanation in the text above.
Kurt Richebacher	USA	Private consultant and investment newsletter writer	2006	Autrian School economist, who emphasizes savings, production and real capital formation as the basis of sustainable economic growth.
Nouriel Roubini	USA	Professor, New York University	2006	Told an audience at the IMF that homeowners defaulting on loans would lead to trillions of dollars of mortgage-backed securities unravelling worldwide and the global financial system shuddering to a halt. These developments would destroy hedge funds, investment banks and other major financial institutions
Robert Shiller	USA	Professor, Yale University	2006	Warned that the level of house prices and household debts would lead to serious trouble in financial markets, and a possible recession sooner than most expected.
Peter Schiff	USA	CEO and chief global stategist of Euro Pacific Capital Inc. a Broker, investment advisor & broadcaster	2006	A high profile investment advisor who predicted that real estate prices would come crashing down and this would highlight the problem of too much consumption and borrowing and not enough production an saving. See the YouTube clip based on this CNBC appearances for a summary of his forecast (linik below).
Wynne Godley	USA and UK	Cambridge Don & advisor to H.M. Tresury	2007	Throughout his career, which began in the 1960s, Godley was concerned about the role and size of debt in an economy. For example, in 2007 he argued that debt growth alongside a house price decline would lead to a deep recession sometime before 2010.
Eric Janszen	USA	Investment advisor (runs iTulip), venture capitalist, and commentator	2007	Analysis based on the global credit system and the massive imbalances between debt and savinfs among nations and peoples. In fact, on the basis of this analysis Janszen currently foresees another big crash in 2014, his rationale being that: interest rates have been suppressed for so long that when the artificial scarcity ends and bonds are finally marked-to-market the repricing will be sudden and violent . . . For more on Janszen commentary it is worth visit his website where he has commentary explaining the next economic cycle.

Having studied Lasn's text and this guide, you will hopefully appreciate the sarcasm of placing 'exceptional talent' in italics, but even so, certainly some praise should be attributed for foreseeing the coming crisis and even more impressively for having the confidence to allocate a time horizon on it. Indeed each of the twelve named economists in Table 1 has acquired some notoriety for their perceptive and radical work, and from an educational point of view, we strongly advise you to follow up the ideas of at least one of them.

Interestingly, as implied in this chapter, there are recurring features that unite each of the contributions in Table 1, namely a concern with:

1. financial assets as distinct from real-sector assets,
2. the credit flows that finance both forms of wealth,
3. the debt growth accompanying growth in financial wealth, and
4. the accounting relation between the financial and real economy.

These features are not listed to suggest that there is a single unifying paradigm that led these economists to their predictions. But all have sufficiently distanced themselves from mainstream neoclassical economics, in particular from its behavioral assumptions and its neglect of assets and debt. This suggests that a non-mainstream approach has been helpful and conversely, that neoclassical economics has a blind spot for financial instability.

Professor Hudson neatly captured, in very general terms, the analysis used to predict the coming crisis, in some cases up to two years before it arrived, in April 2006 for *Harper's Magazine*. In it he wrote that:

"The bubble will burst . . . America holds record mortgage debt in a declining housing market . . . Rising debt-service payments will further divert income from new consumer spending. Taken together, these factors will further shrink the "real" economy, drive down those already declining real wages, and push our debt-ridden economy into a stagnation or worse."

Similarly, Stephen Keen, an associate professor of economics and finance at the University of Western Sydney, broadcast in Dec 2006: that the debt-to-GDP ratio in Australia (then 147 per cent) "will exceed 160 per cent of GDP by the end of 2007. We simply can't keep borrowing at that rate. We have to not merely stop the rise in debt, but reverse it. Unfortunately, long before we manage to do so, the economy will be in a recession. The reasons are simple: paying down excessive debt causes borrowers to stop spending—whether that means households that cancel order for the latest LCD TV, or firms that put off that planned expansion of capacity. Income plummets, but debt continues to rise simply because of the effect of compound interest. The debt to GDP ratio starts to fall only when a substantial slab of income is devoted to paying debt, but that in turn means a serious recession."

A recurring point of this chapter is that none of this strikes one as "rocket science," it is simply a matter of changing perspective, and as a student studying economics in a post 2007 world you really owe it to yourself to find the time to grasp this new material. As already suggested, the sources related to Table 1 provide a good place to start.

Remember, taken as a group those that forecast the financial crisis have set in motion a re-evaluation of the neoclassical field, we leave it to you to make sure that those studying and lecturing in established university departments are as conscious of these developments as you should now be. As suggested, the analysis of those 'who saw it coming' (listed in Table 1) have certainly provided a call to arms; as they have in effect set up an outline tactical plan to launch the first round of the battle for the soul of economics . . . .

REFERENCES AND RECOMMENDATIONS

Akerlof, G (1970) "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*.

Baker, D, B DeLong, and P Krugman (2005) Asset Returns and Economic Growth,

Brookings Papers on Economic Activity 2005:1

Harrison, F (2005) Want to get rid of boom and bust? Tax land, not income *The Guardian*, 11 April

Harrison, F (2005) Boom Bust: House Prices, Banking and the Depression of 2010, London: Shepheard-Walwyn

Hudson (2006) The Road to Serfdom: An Illustrated Guide to the Coming Real Estate

Collapse, *Harper's Magazine*, April 2006

Keen, S (2006) The Lily and the Pond. Interview reported by the *Evans Foundations*, at http://evatt.org.au/news/445.html

Krugman, P (2009) How Did Economists Get It So Wrong? *New York Times*, 2 September 2009.

Lucas, R (2009) In defense of the dismal science. *The Economist*: New York and London (6 August 2009)

Mankiw, G (2009) "That Freshman Course Won't Be Quite the Same". *New York Times* (24 May 2009)

Roubini, N and Mihm, S (2010) *Crisis Economics: a crash course in the future of finance*. Penguin Books: London and New York

Smith, G (2012) Why am I Leaving Goldman Sachs, *New York Times*: 14 March 2012 (letters page).

Stiglitz, J (2013) *The Price of Inequality: how today's divided society endangers our future*. W.W. Norton and Company: New York and London

Stiglitz, J and Akerlof, G (2009) A new economics in an imperfect world. *The Guardian*: London and Manchester (28 October 2009)

Turner, A (2010) "After the Crises: Assessing the Costs and Benefits of Financial Liberalisation" *14th Chintaman Deshmukh Memorial Lecture*, Reserve Bank of India, Mumbai 15th February 2010

CHAPTER 2
PARADIGM LOST

The next set of challenges raised in *Meme Wars* relates to society's obsession with consumerism and the damaging effects it causes to peoples' psyche and the environment. Such questions lie at the heart of Kalle Lasn's daily work as Director of Adbusters, where for twenty odd years he has rallied against the world of capitalism, by organizing stunts such as *TV Turnoff Week* and *Buy Nothing Day*. Both of these annually sponsored events, run alongside the Adbusters magazine, which is famous for designing spoof versions of commercial adverts (known as subverts & samples of which are dotted throughout the text), earn Adbusters a reputation for culture jamming.

In the broader context of *Meme Wars,* the cultural jam is to challenge self-interested individuals to question where they are going. As the opening paragraph to Chapter 2 reminds readers: "Back in 1989, when we started Adbusters, there was something profound about the idea that the Earth was alive, that it was Gaia . . . that the rivers were her veins, the forests her hair, the oceans her lungs . . . that the planet was a living breathing entity . . ."

Twenty-five years later, however, we have reached a tipping point and it is universally acknowledged that we are killing species and habitat at an alarming rate; poking holes in the ozone layer; expanding deserts; turning rain into acid and depleting earth's resources.

Chapter 5 picks up the theme again and appeals to all the anxious members of society that suffer from mental illness due to subliminal marketing pressure. As Lasn says: "Could consumer capitalism be one of its root causes? Is advertising just a benign way of stimulating the economy or does this trillion dollar a year worldwide industry represent something more ominous for our economic and mental wellbeing? Could the nonstop noise and emotional blackmail—3,000 marketing messages injected into your brain every day whether you like it or not—be the source of the anxieties, mood disorders, and depression so many of us suffer from? What does your economics professor have to say about that . . . ?"

No doubt they will respond to this rhetorical question by reminding you that the core objective of economics is to make use of the world's scarce resources in such a way that as many of people's wants can be met both now and in the future to improve the human condition. In other words, to achieve economic growth, at all costs, and facilitate higher standards of living for all. The difficult question then is how students should approach their studies in a world that is becoming unsustainable? What questions should they ask? In short, are they ready to wage an all-out meme war for planet Earth?

QUESTIONS FOR YOUR PROFESSOR:

1. Are the principles of individual markets in conflict with the ecosystem?
2. How does climate change factor into economics?
3. Why are we selling off our planet's natural capital?
4. What is the economic cost of the epidemic of mental illness now sweeping the globe?

GUIDANCE NOTES

The standard neoclassical microeconomic approach assumes that the actions and decisions of individuals are self-interested, and that most people behave like some sort of supercomputer—always gathering every relevant bit of information and weighing up all available options. To arrive at not just a good decision, but the very best as economists like to call it—*an 'optimal' allocation of resources*. The macroeconomist then proudly assesses the sum total of all these individual acts in the publication of annual accounts that provide GDP data and the only result they want to see are figures that portray a larger real amount of economic activity than the previous year. In a nutshell, economists seek economic growth, without any limitations. The only way is up. There is no moral compass or community spirit!

Gross domestic product (GDP) solely measures the monetary value of goods and services produced in a country, and the conventional paradigm is to use these figures as a headline indicator of a society's success and progress. There are, however, many problems with the GDP meme. Firstly, rising GDP does not necessarily mean that the average person is any better off. Secondly, GDP also includes economic activity related to undesirable situations, such as: cleaning up oil spills, earthquakes, and nuclear contamination, and rebuilding after natural disasters such as a tsunami. And thirdly, GDP fails to account for the time and effort that goes into unpaid activities such as housework, providing care or improvements in the quality of life produced from healthcare.

The problem of assessing the wealth of different nations has intrigued economists for several decades. The mainstream database for many years was the annual series of indicators produced by the World Bank demonstrating the GDP per capita of more than 200 countries. Arguably this metric is spoiled by the fact that incomes are certainly not distributed evenly, and as the 99 per cent group (discussed in the introductory chapter above) highlighted GPD per capita has become almost meaningless in countries that are now so unequal in income distribution. In fact, during the current recession any growth that does occur is only sucked up by the few. Regardless the average GDP figures per capita are frequently referenced to portray a league table of the richest and poorest nations. In fact, the data is used as the official basis for the boundaries between high and low-income countries.

The neoclassical position appears to be that consumerism is best measured by the monetary value of all the goods and services made available each year. Hence, Gross Domestic Product and its annual growth have been of central importance to mainstream economists since Adam Smith wrote the first treatise on the subject. To some extent this is evidenced by the obsession with the quarterly release of the provisional GDP figures—which politicians across the globe examine in the hope that continual economic growth will be revealed.

Furthermore, the conventional mind-set of those presently managing firms and lecturing business students mirrors the approach taken by neoclassical economists; that bigger is best; that increasing turnover is the annual goal, and the only measure of progress is material accumulation. For this to be replaced with a genuine sustainable perspective, a commitment to understanding the ideas of environmental economics becomes most important.

It is worth closing this introductory note with the observation that both neoclassical and environmental economists share a common belief that consumers and producers express preferences through their willingness to pay. This may appear ironic, but it seems that in the final analysis most economists are preoccupied with expressing everything in monetary value. This suits neoclassical economists whose main point of reference is the trade of material goods and services in markets at specified prices. It is far more problematic for environmental economists who seek to place monetary values on environmental goods and services that are commonly treated as 'free' goods. But as Professor Robert Costanza and his team of researchers (1997) has pointed out through his research on the value of the world's natural capital: "If ecosystem services were actually paid for, in terms of their value contribution to the global economy, the global price system would be very different from what it is today." More importantly, their work has highlighted the absence of these items on the ledgers of the world economy. If Earth were a company, Costanza famously quipped, "we would definitely fire the CEO" as the loss of these environmental services would spark a financial meltdown unparalleled in modern history.

To conclude, continuous economic growth is clearly an objective of all governments. To get growth to rise from 1.8 per cent to 1.9 per cent, or even better to 2.0 per cent is the ultimate goal of neoclassical wisdom. The battle, therefore, is to convince future students that the mainstream professors and the politicians that they advise are worshiping a false god.

THE DEATH OF NEOCLASSICAL ECONOMICS

For a considerable period of time there has been growing debate about the use of GDP figures to measure welfare. This has been allied in many, though not all cases with a discussion of whether chasing economic growth is either sufficient or necessary to increase welfare. As suggested above the standard criticisms of GDP per capita as a measure include:

- It takes no account of the distribution of income; yet there is evidence to suggest that unequal societies are less happy than more equal countries, even if average income is lower.
- It ignores political unrest and war, both of which are likely to reduce welfare.
- It takes no account of the future; a country depleting all natural resources may well achieve a higher current GDP per capita than another which pays no attention to conservation, but in the long run this is unsustainable.
- It does not make any adjustment for expenditures relating to environmental measures, such as pollution.

GDP data is materialistic in the extreme but people certainly derive welfare from a great variety of other, non-monetary based factors—such as the enjoyment of a walk in the countryside, the freedom to practice religion, the companionship of family and friends and so on. In other words, individual welfare depends upon many sources of satisfaction, not just those gained from the monetary value of goods and services consumed. As Robert Kennedy refreshingly pointed out in his 1968 election campaign, GDP measures everything except those things that make life worthwhile.

The challenge therefore is to shift the emphasis from focusing exclusively on national accounting to aspects that effectively monitor the quality of life that people experience; the GDP meme needs to be unraveled. To this end there has been a branch of economics that has examined such questions for decades, but the neoclassical grip has not let the so-called welfare economists breathe. Alternative measures have extended metrics of well-being to include life expectancy, levels of education, pollution and so on. This struggle between welfare and wealth has been recognized since the 1950s when various alternative mea-

Table 2: Alternative Indicators

Name	Background	Significant Year	Linked Resource	Overview
Index of Sustainable Economic Welfare (ISEW)	The Index of Sustainable Economic Welfare (ISEW) was initially developed in the USA by Herman Daly and John Cobb. It is regarded by the Friends of the Earth as the most advanced alternative indicator. The resource hyperlink discusses what it is about and then gives you the opportunity to make your own ISEW.	1989	Make Your Own ISEW	The ISEW commences from consumption as measured by GDP and makes various adjustments to account for the factors that are typically ignored. For example, "defensive expenditures" incurred to offset the adverse environmental effects of economic growth are subtracted. The following formula is an approximate definition: ISEW = personal consumption + public non-defensive expensitures - private defensive expenditure + captial formation + services from domestic labor - costs of environmental degradation - depreciation of natural capital
The Happy Planet Index	The Happy Planet index is an attempt to combine human well-being and environmental impact into one index. The index is weighted to give progressively higher score to nations with lower ecological footprints.	2006	Ted lecture by Nic Marks on HPI	Statistician Nic Marks asks in thie TED lecture (recorded in August 2010) questions why we measure a nation's success by its productivity—instead of by the happiness and well-being of its people. He introduces the Happy Planet Index, which track national well-being against resource use (because a happy life doesn't have to cost the earth). It takes less than 20 minutes to watch!
Happiness	The latest trend in alternative measures of GDP is based on survey questions about peoples levels of anxiety, satisfaction and feelings of being worhtwhile. Supporters of this work assert that happiness—rather than wealth, income or profit—should be maximized. It is regarded as a supplement to GDP.	2010	Gross National Happiness (Bhutan)	The tern "gross national happiness " GNH is most strongly related to Bhutan where the pursuit of holisitc, inclusive and truly sustainable development is being trialled. Bhutan's unique culture based on Buddhist spiritual vales are seeking to make GNH more important that the GNP. The link to the video clip is fascinating and it only takes 12 minutes to watch. The UK began to measure national well-being in 2012, based partly on the addition of five new questions to the Integrated Household Survey: • Overall, how satisfied are you with you with your life nowadays? • Overall, how happy did you feel yesterday? • Overall, how anxious did you feel yesterday? • Overall, to what extent are the things you do in your life worthwhile?

sures began to be introduced and the sacrosanct nature of GDP was challenged. International high profile examples include the United Nation's annual publication of the *Human Development Index*, and the ecological accounts produced by the EU funded *Global Footprint Network* (as discussed in the Bill Rees extract in Chapter 2). The former is a combination of various social metrics used to arrive at a position of societal development based on more than just GDP. The latter, on the other hand, is far more radical as it aims to provide a mathematical model to determine sustainable levels of consumption for cities and civilizations. It treats the global system as a whole rather than examining countries in isolation.

The idea that economies inevitably have their limits, however, seems obvious. It was alluded to by John Stuart Mill in 1848 and explicitly stated by Meadows et al. in their 1972 report aptly titled *The Limits to Economic Growth*. This message has subsequently been trumpeted by environmental economists who cannot accept that the ecosystem, or nature, is merely another sector of the economy that can be dealt with by market forces. They do not accept the argument that technology will substitute all shortages.

Environmental economists proceed from the basic premise that there is an inevitable interdependence between the economy and the environment; and there is no guarantee that either will prosper in the long term unless governments enforce measures that make firms acknowledge the complete life cycle costs arising from their economic activity. Daly (1999: 81) has crudely characterized the ideas of the neoclassical school: 'The economic animal has neither mouth nor anus—only a close loop circular gut—the biological version of a perpetual motion machine.' The important concept that Herman Daly and his environmentally conscious contemporaries bring to economics is the greatly undervalued contribution that the environment makes to the economic system. For example, the environment provides all the natural resources and raw materials needed to start economic activities, most obviously those in the agricultural, construction, and manufacturing sectors. The environment also provides mechanisms for absorbing the emissions and waste. In short, in this relatively modern view, the economy is viewed as a subsystem of the environment!

As Lasn expressed it when opening Chapter 5 "Economists and lay people alike are realizing that our human money economy is a subset of the Earth's larger bioeconomy and not the other way around. This shift in perspective changes everything . . . it invites us to see the world with new eyes . . . to value things differently . . . to rethink growth . . . to redefine progress and how it is measured. Above all, it opens the door to a whole new mix of exciting economic policy alternatives for nations, businesses and individuals to pursue".

In discussions of sustainability the environmental and social dimensions cannot be ignored, yet traditional mainstream economic textbooks do not refer to life cycle analysis or any of the equivalent auditing systems that measure the broader environmental impacts. More importantly, the adoption of a new economics will not just happen; it will require the concentrated push of students.

REFLECTIVE SUMMARY

This section draws from three chapters of *Meme Wars,* namely: *Paradigm Lost* (Chapter 2), *Birth of a New Science: Bionomics* (Chapter 5), and *Psychonomics* (Chapter 6). Together these chapters review the seemingly inane quest for economic progress despite a large number of international conferences on sustainability and publications questioning the logic of endless growth. Traditionally the debate centered on the concept of welfare, whereas the modern equivalent seems to be about indicators of well-being and 'happiness'. A review of any one of these challenges will give you ammunition to attack the neoclassical stronghold that has achieved its coherence as a science by amputating most of human nature from economics. As Lasn points out, "an interdisciplinary groundswell is now bubbling up. Its goal: Put full-blooded human beings back into the driver's seat of economics."

The possibilities for review within the covers of *Meme Wars* include the work of Fritz Shumacher, Herman Daly, Robert Costanza, Timothy Morton; Bill Rees', and the World Watch organization that annually produce a *State of the World Report.* Alongside these lines of attack are some new weapons that question the metrics of growth. In many cases the output of these hybrid economists draw inspiration from psychology, sociology, anthropology, philosophy, ecology, mythology, and neuroscience; in effect they have integrated emotion, social relations, empathy, religion, morality, and virtue into the world of economics. In Lasn's terms these "psychonomists" have done their homework in the streets, in Zuccotti Park, in the slums and favelas of the world . . . they know what it feels like to go hungry, to lose a home, to not have enough money to pay for a life-saving drug. And they have come to a stunning conclusion: When the chips are down, cooperation rather than selfish interest is the key to survival."

As pointed out above, another possible line of attack lies in the development of new targets that will demote the worship of GDP. International examples of new alternatives measures include: Daly and Cobb's *Index of Social and Economic Welfare*; the New Economics Foundation's *Happy Planet Index*, that builds on Bill Rees' work on ecological foot-printing; and various bits of research on measuring happiness, that is derived in part from the work of Richard Layard (2005). Table 2 contains a brief summary of the background to these alternative indicators and some links to explore.

Which of the alternative measures, reviewed in Table 2, is the most promising, is a difficult question to answer. The ISEW and HPI seek to displace the GDP measure and the broad ranging work on happiness seeks to supplement GDP data. It is too early in terms of development to determine if any one of these will succeed in undermining the neoclassical respect for GDP or if another metric or alternative will succeed, but the seeds are sown and some follow up research will help you appreciate the plot.

As suggested above, many free thinking economists have long regarded GDP as a misleading indicator or even as a proxy of the welfare of a nation, let alone as a measure of people's well-being. For example, the United States has achieved striking economic and technological progress over the past half century without gains in the self-reported happiness of the citizenry. Instead, uncertainties and anxieties are high, and economic inequalities have widened considerably. Perhaps for these reasons, life satisfaction has remained nearly constant during decades of rising Gross National Product (GNP) per capita. In a similar vein, UK government funded research suggests that happiness depends on a number of factors, which include not only post-tax-and-benefit income per head and wealth per head, but also the nature of relationships and family set-ups, neighborhoods, health, job satisfaction and security, unemployment, sleep patterns, etc (ISER, 2011). In sum, GDP per head gives an incomplete picture of well-being.

The video case study hyperlinked in Table 2 tells the story of Bhutan, where the goal of happiness over the goal of wealth has become an organizing principle for governance and policy-making. It has now begun to inspire wider international appeal and a Gross National Happiness Index is developing.

As John Helliwell *et al.* (2012) perceptively commented in the introduction to the *World Happiness Report*, "GNP is a valuable goal, but should not be pursued to the point where economic stability is jeopardized, community cohesion is destroyed, the vulnerable are not supported, ethical standards are sacrificed, or the world's climate is put at risk. While basic living standards are essential for happiness, after the baseline has been met happiness varies more with quality of human relationships than income. Other policy goals should include high employment and high-quality work; a strong community with high levels of trust and respect, which government can influence through inclusive participatory policies; improved physical and mental health; support of family life; and a decent education for all. Four steps to improve policy-making are the measurement of happiness, explanation of happiness, putting happiness at the center of analysis, and translation of well-being research into design and delivery of services". Hence the OECD is currently developing guidelines on the *Measurement of Subjective Well-being*.

So the cracks in the argument have begun to gape and a *meme war* is needed to displace the current position. The points of weakness in methodology that mainstream economics is currently facing and the number of alternatives being suggested not only make the neoclassical camp vulnerable to attack but also provide ample ammunition to fight the good fight. The main hurdle to overcome is the way the neoclassical monopoly has been exploited in the lecture hall and brainwashed successive generations of students into measuring economic reality with a distorted rule. Our recruits must grasp the full picture and 'question' what is really meant by economic growth, progress, well-being, happiness etc. Indeed it is most important for the purposes of this specific battle that all meme warriors have the confidence to ask their professors what is meant or implied by increases in GDP, and be ready to fire alternative metrics into the field. So prepare for battle by rehearsing the attack and counter attacks; remember we are seeking to achieve a paradigmatic shift that allows the study of economics to serve a better place, with more realistic tools.

REFERENCES

Costanza, R., D'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., O'Neill, R., Parnefo, J., Raskin, R. and Sutton, P (1997) "The Value of the World's Ecosystem Services and Natural Capital" *Nature* 387: 253–60

Daly,H. & Cobb, J. (1989) *For the Common Good*. Beacon Press, Boston

Helliwell, J., Layard, R., and Sachs, J. (2011) *World Happiness Report* The Earth Institute University of Columbia

ISER (2011) *Understanding society: Early findings from the first wave of the UK's household longitudinal study,* Institute for Social and Economic Research: University of Essex

Layard, R. (2005) *Happiness: lessons from a new science* Penguin: London

Meadows, D.H., Meadows, D.L., Randers, J., and Behrens, W. (1972) *The Limits to Economic Growth—A report to the club of Rome*. Universe Books: New York

CHAPTER 3
THE LOGIC FREAKS AND THEIR OPPONENTS

The third and final section to be reviewed by this guide is the battle against the methodological approaches adopted by the neoclassical school. As students will have noted the preferred "modus operandi" of mainstream economists is to treat people in isolation from one another; working from an assumption that each individual's behavior is rational and logical. In effect there is only one representative agent making economic decisions; the textbook's "rational logical economic man." This assumption takes us to the related methodological premise that human behavior can be modeled with mathematical precision, and it is from this basis that economics seeks to gain its positive, empirical, scientific credentials. The downside is that theory and quantity become elevated over quality and experience. In short, intuitive, empathetic analytical economics is taken over by algebraic number crunchers. As stated in the opening section of the third Meme Wars attack: "Modern economics is sick . . . It has become an intellectual game played for its own sake and not for its practical consequences for understanding the economic world. Economists have converted the subject into a sort of social mathematics in which analytical rigor is everything and practical relevance is nothing".

As a consequence, the intellectual pursuit of the profession nowadays is to produce abstract, possibly even beautiful, models that describe a theoretical reality. As a side effect, mathematical gymnastics, as a means of clarifying the nature of economic behavior, has reached ludicrous proportions. Neoclassical economists seem to have progressed from a position where they had insisted upon the primacy of "self-interest" in order to model human behavior, to a position where self-interest is no longer just a fact for these thinkers, but also an ideal. In short, the numbers game has taken over the establishment. This was scarily illustrated by the development of the algorithms that gave financial traders on Wall Street and beyond the confidence to take huge financial risks with other people's money. The formulas used to determine an asset's value over time are based on a handful of abstracted market indicators like interest rate, portfolio value, strike price, volatility, and original stock cost. The sum of the equation produces a risk indicator and allows investors to hedge accordingly and to trade ever-expanding complex packages of economic bets and diced-up financial goods, as described in Chapter 1.

As Darren Fleet, a journalist employed by Adbusters expresses it: The simple equation that was never meant to be more than an indicator, morphed into the greatest irrational belief in rationality of our time. By 2008 hundreds of complex mathematical functions became the talisman in every investor's pocket, doing to numbers what alchemists once claimed to do to bars of lead—turn them into gold.

As we now know, it all ended in tears. The financial crash rocked the world, but still neoclassical economists prefer to place their faith in logic freak algebra, rather than common sense.

QUESTIONS FOR YOUR PROFESSOR

1. Can economics be an exact science?
2. Do economists suffer from an academic inferiority complex, called physics envy?
3. Is economics a cold theoretical game or a profoundly personal discipline that goes to the heart of who we are as human beings?

GUIDANCE NOTES

Society has experienced the greatest economic crash since the great depression in the 1930s, yet economists have done very little to accept flaws in their methodology or their preoccupation with growth. This message is clearly at the heart of the *Meme War* battles that we want to recruit you to. What is also apparent in our attack of neoclassical economics is the fact that dissatisfaction with the mainstream is not new.

In 1841, more than 170 years ago, Charles Mackay wrote of the *madness of crowds*. One hundred years later, Keynes began a literature discussing what he referred to as *animal spirits*. Both sets of ideas emphasize the pressure of group behavior. As Mackay expressed it: millions of people become simultaneously impressed with one delusion, and run after it, till their attention is caught by some new folly more captivating than the first." In other words, people demonstrate herd behavior and have a passion for things that others have. Moreover, the number of choices that an individual faces today runs into such large numbers that they cannot be executed in a rational way. You cannot take each decision and compare it to your preferences. You take short cuts. You ask friends for advice. You read reviews on the web. For example, if I wanted a new smart phone I would seek the opinion of a younger member of the family. In short, choices are often made on your behalf by people that you trust.

Consequently, the whole idea of mathematical modeling becomes questionable, and again many economists have expressed their concern. For instance, Nobel laureates Ronald Coase and Robert Solow launched similar attacks that boiled down to an observation that economics had become a mathematical system floated on an assumption of models which bear little relation to what happens in the real world. Thirdly, in 1999, Milton Friedman concluded that:

"Economics has become increasingly an arcane branch of mathematics rather than dealing with real economic problems."

These disillusioned high profile professors are just the tip of an iceberg. There are many other more radical and diverse critics of the subject. In fact, there is a pluralism of approaches waiting to be drawn on for support. To name just some of them: Institutional, Islamic; Post-Keynesian, Marxian, Buddhist, Anthropological, Ecological, Behaviorist, and Feminist. As the labels suggest, the attack is being led from many sides as each of these groups reveal things about the economy that others do not. In short, they challenge the ignorance upon which neoclassical hegemony depend.

All seem to distance themselves from mainstream neoclassical economics, in particular from its behavioral assumptions, its methodological stance, and the all-embracing solutions that embarrass an increasing number of the profession. This confirms the viability of an alternative approach and gives plenty of ammunition to those who are in a warring mood.

THE DEATH OF NEOCLASSICAL ECONOMICS

We are now more than six years into the global crisis and the esteem of mainstream economics has reached an all-time low. The general problems are two-fold: as we spelled out in Chapter One, mainstream economists failed to predict the financial crisis that commenced in America in 2007 and secondly their methodological approach, based on the mathematical models discussed above, have failed to ameliorate the problems caused. Fortunately, however, there are clearly plenty of alternatives to the mainstream approach and theory. In generic terms, the non-conventional radical economists fall into two groups the *Heterodox* and *Post Autistic*. The former has a longer history and more varied set of roots, whereas the Post Autistic Economists emerged, rather surprisingly, as a response to a group of disillusioned students who circulated a petition in Paris in June 2000 calling for the reform of their economics curriculum. In essence the two radical groups introduced above share the argument that the dominant models assume imaginary worlds that have little or nothing to do with the world we actually live in. The branding of both groups neatly captures the problem of mainstream neoclassical economic thinking as narrow minded "orthodox" and "autistic!" That is, like many of those that suffer from autism, strict (kosher) neoclassical economists are diagnosed as intelligent but narrowly focused, with a tendency to be obsessive, and cut off from the outside world. They act as if they have found a new religion; that gives meaning to their subject and a set of methodological rituals to go with it. Just like other fanatical groups they have figured out the answers to everything. In effect, creating a kind of "new intellectual game" that is devoid of any necessary links to reality. This so called wisdom has dominated the lecture halls for so long, that many of the professors have become set in their ways, ignorant of the alternatives, and even acquired a kind of academic arrogance where they can seemingly provide answers to all those with inquiring minds. So take care not to be fooled or deceived by the defense that is put forward; the truth is the rituals no longer fit the reality.

Unemployment has reached worryingly high proportions, especially among the young; economic growth has failed to return to its pre-recession level—even after five years of trying; and there is still much debate about how to regulate banks and revive lending. As a consequence the non-conventional, radical, groups of economists have gained thousands of recruits who believe in their cause. As stated above, they are against the disciplines' use of mathematics as an end in itself, against the refusal to take seriously any theory not based on nineteenth-century neoclassical theory, and against the dogmatic teaching style that aims to indoctrinate rather than educate. The new recruits are attacking on various fronts; the movement is pluralistic, critical in its thinking, and fully engaged with real economic issues and problems.

Most importantly from the perspective of this guide, students should take inspiration from the Parisian students referred to above as their localized discontent quickly found like-minded students in economic departments studying as far afield as Cambridge (UK) and Harvard (USA)—these movements are respectively reviewed across the first few pages of Chapter 7—aptly titled *Meme War on Campus*. Within a year these seemingly small beginnings, in 2000 to 2001, had spawned an international movement, supported by literally thousands of students, a good number of their teachers, and media commentary from the great and the good of the profession. The French Minister of Education had also commissioned a report to investigate the suitability of the economics curriculum in higher education. So from humble beginnings a movement founded on the questions and evaluation of students had led to a partial overhaul of economics teaching. Now more than a decade later, when students are faced with a global financial crisis that has caused the needless withdrawal of employment opportunities, the increasing cost of tuition fees and marked increases of the inequality of existence between the rich and everyone else; it is surely time for a more embracing and fuller overhaul of the economics curriculum.

REFLECTIVE SUMMARY

Primarily, this section draws from four chapters of *Meme Wars,* "The Logic freaks," "Meet the Mavericks," "Meme Warfare on Campus," and "The Early Pioneers." Together these chapters review the methodological crisis that modern economics is currently facing and introduce a good number of alternatives. The general stance adopted is that the neoclassical monopoly exploited in the lecture hall has brainwashed successive generations of students into viewing economic reality through a distorted lens that misrepresent today's world.

What is needed is space in the curriculum for new ideas that effectively challenge the traditions of the subject, and we encourage you to follow up the writing of *at least one* of the economists listed in Table 3 (click here for a PowerPoint of Table 3). There is a wealth of ideas presented here that contribute new explanations of how economic systems work and these alternatives are now part of a community that requires fresh graduate recruits to fight our corner.

WHAT'S WRONG WITH ECONOMICS

Taking the work listed in Table 3 chronologically, it is possible to divide the dissent into three waves of attack. The first wave of attack began more than 40 years ago when Kenneth Boulding, Fritz Schumacher, and Herman Daly all published grave concerns about the neoclassical approach. Each of these stalwarts of the radical school is firmly rooted in the twentieth century; what Lasn categorizes as "early pioneers." In fact, Boulding and Daly are acknowledged as the founding fathers of environmental and ecological schools of thought and Schumacher developed and introduced what he called "Buddhist economics"—a set of principles based on the belief that individuals need good work for proper human development. They each present a good example of heterodox economics. Their sweeping indictments of the neoclassical approach question the traditional models that allow unlimited growth and consumption. They all embrace the importance of renewable resources. Furthermore, they all regarded employment as a path to personal fulfillment, not simply a sacrifice of time in exchange for income. For example, in a Buddhist economy, work must always be regarded above the product, and employment integrated into a broader value system aimed at limiting wants. By treating labor as a market abstraction, a commodity to be subtracted and added for maximum efficiency, modern economics overlooked its fundamental commitment to the individual. Schumacher in 1979 went on to publish a further treatise entitled *Good Work*. They all approached economics as if people matter. To reiterate the colorful way that Lasn expressed it: "They thought big and questioned what we all thought were sacrosanct axioms of economic science. They dared to poke at the unspoken assumptions. They made the skeletons rattle".

The second wave of attack is represented by Joseph Stiglitz, George Akerlof, and Paul Ormerod. Each of them have high profile academic records (indeed two of them jointly won the Nobel Prize for economics in 2001) with independent and unorthodox views, they hold professorships at some of the most prestigious universities in England and America and have advised governments on both sides of the pond. In short, they are helping to crumble the old certitudes and form new manifestos from within the establishment, what Lasn refers to as "mavericks."

They share a common interest in understanding how an economy really works, recognizing that the world is too complex to be based on individual behavior and represented by mathematical models. In other words, this attack is led by a group of "behaviorists" who challenge the idea that people make 'rational' decisions based on the 'perfect information' that they individually have access to. In fact, Stiglitz and Akerlof developed the concept of "bounded rationality," which highlighted that although we may try to make the best decision, we may not succeed due to a lack of vital information. Similarly, Paul Ormerod questions the premise of a rational economic agent (person) and places greater emphasis on the influence of 'networks' in decision making. So in a world of bounded rationality, and group pressure, people who binge on junk food or smoke heavily are not necessarily seen as making the best possible decision. Taken together the work of Akerlof, Stiglitz, and Ormerod takes a huge step forward in making economics more realistic. As Stiglitz (2009) cleverly observed, "if the United States is going to succeed in reforming its economy, it will have to begin by reforming economics".

The third wave of attack brings us right up to the present, as it represents a group of economists who strongly believe that the neoclassical faith in the stability of markets contributed directly to the economic crisis that began six years ago in America (in 2007) and spread across most of Europe during 2008. They get a lot of kudos out of the fact that neoclassical mainstream economists fail to explain why the crisis occurred and what needs to be done to end it. This relatively young group of economists includes Steve Keen, Gilles Raveaud, and Julie Mattieau. They see the battlefield to be the campus, the lecture room and the library. Indeed they take great pride in denouncing the set texts that present economics as a unified discipline with all the answers. For example, Gilles Raveaud's biopic in Chapter 7 opens cynically as follows: "You might not have heard of Gregory Mankiw, the Harvard economics professor and former adviser to George W. Bush, who is arguably one of the most gifted economists of our generation, but he is also one of the most effective and talented propagandists of our times. His target: young economics students. His field of operation: the world's universities. His weapon: the bestselling economics textbook in the world. It includes thirty-six chapters and eight hundred pages of color illustrations, graphs, stories and interesting asides. Don't worry if you or your kids don't speak English; Mankiw's text surely exists in your language."

For convenience sake we refer to this third group as "paradigm shifters." They are pragmatic and logical, united by their extensive criticism of conventional economics. Each of them regards neoclassical approaches as presenting a misleading view of how the world actually operates, and each of them offers suggestions of what needs to be replaced. They all currently write and lecture on the virtues of the competing paradigms of economics and are forcefully calling students to take up arms. As Lasn optimistically summed up their contribution: "A scientific revolution is brewing. Over the next few years, on campus after campus, a new breed of economists — open, holistic, human-scale — will chase the old goats out of power and begin the work of reprogramming the doomsday machine".

In conclusion, the seeds of hope for Lasn's meme war have been well and truly sown; a movement that began in 2000 quickly captured the imagination of economists around the world, and since 2007 there has been a fresh momentum. An increasing awareness of the problems and culture of the global financial regime has given rise to the occupy movement whose members were from all walks of life, many of whom had suffered through the withdrawal of life-supporting services in the false name of "good economics."

It is important, therefore, that the messages unpacked by this guide do not leave Lasn's colorful contributions to fall on deaf ears. He has made an elegant call to attack. It is now your responsibility to make sure that you respond and contribute to the creative destruction of neoclassical economics. The graveyard of capitalism, which once sustained the United State and Europe, needs to be dug over and redeveloped. The American dream of equal opportunity that spread to Western and Asian communities is no longer a reality. Markets cannot be trusted to set the value of anything. The myth of neoclassical utopia and equilibrium needs revision. As Kalle Lasn made explicit in his *Preface to the Student*, before you is a decision moment: *"You can ignore all of the screaming inconsistencies and accept the status quo. You can cross your fingers and hope the old paradigm has a generation or two left in it, enough for you to carve out a career. Or you can align yourself from the get-go with the mavericks. You can be an agitator, a provocateur, a meme warrior, one of the students on campus who posts heterodox messages up on notice boards and openly challenges professors in class. You can bet your future career on a paradigm shift."*

So bombard your professors with questions and pave the way for the alternatives that we have outlined above. Remember, the pen is mightier than the sword; phrase those questions and let the battle commence.

REFERENCES

Mackay, C. (1841) *Extraordinary popular delusions and the madness of crowds*. Harriman House 2003 (there are 92 modern editions of this book)