The Invisible Hand

Speech delivered to Mensa at Cambridge

The year 1776 is remembered for many stirring events. The philosopher David Hume died in Edinburgh. He is not only regarded by many as the greatest philosopher in the English language, but also the most convivial. In a game which philosophers play, they are invited to assemble a dinner party of 10 great thinkers from history, chosen not for their intellect, but for their good company. The question is always posed as 'After David Hume, who would the other nine be?' He was a great loss.

Also in 1776, Edward Gibbon published the first volume of The Decline and Fall of the Roman Empire, which was, deservedly, an instant sensation. His overview was that ultimately, it was Christianity which caused that decline and fall and he clearly took the view that this was "Bad Thing"

In Glasgow in 1776, James Watt demonstrated the first working steam engine. There had been primitive predecessors, but they were toys compared to his. This was an efficient engine that could do real work and great things would come from it.

Over in the colonies in 1776 other events were taking place. The Declaration of Independence was written by, my hero, Thomas Jefferson as the Americans prepared to secede. He wrote 'We hold these truths to be sacred and undeniable' but the rather more prosaic and level-headed Benjamin Franklin crossed it out and wrote 'self-evident'.

These were all momentous events and would, happening all in one year, have made it a memorable and famous one. That same year, 1776, however, saw yet another great event. It marked the publication of a book entitled 'An Enquiry into the Nature and Causes of the Wealth of Nations', usually known by its abbreviated title and written by Adam Smith.

Like Gibbon's book it was a sensation. Its insights substituted sense for medieval mysticism. It invented the modern discipline of economics. Before Smith people had thought that a nation's wealth was measured by the amount of gold and silver in its vaults. Kings and princes struggled to bring as much precious metal into their countries and to ensure as little as possible going out. They tried to restrict imports and promote exports. Because they all did it they usually cancelled each other out. It was literally a policy of beggar my neighbour and it restricted wealth for everyone.

'Wrong' said Smith. The wealth of nations lies in the productive output of its peoples. It is the goods and services they produce that measure it not bars of gold and silver buried in state treasuries. Among the many telling insights that are scattered like gold nuggets throughout this book is one identified by Smith, and later named by Ricardo. It is the theory of comparative advantage. This is still not widely understood today, not by politicians nor trades unionists and least of all by environmentalists or other forces opposed to globalization.

The theory tells us that if we buy from someone else who can do it cheaper and better, they become richer because they receive our cash. We become richer because we spend less on securing our goods and services than we might otherwise have to and can spend the savings on other things. The theory is borne out by a thousand cash histories. Whenever nations have traded more they have become richer. When they have restricted trade they have restricted growth.

Trade does not have a winner and a loser: it has two winners. The seller would rather have the money than the goods and the buyer would rather have the goods than the money. Both are better off even though neither might intend the betterment of the other party.

This brings us to one of Smith's great insights. We might act, he said, in enlightened self-interest, but the effect is to benefit others. When we wish to increase our wealth we provide goods and services that people wish to buy at prices they are willing to pay. We become rich in the process, but an unintended consequence of our action is the betterment of others.

'It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner,' Smith famously said, 'but from their regard to their own interest.' In seeking to advance their own interest they help us thereby to advance ours.

You will note that one of the virtues of a market is that people do not have to act virtuously to produce worthwhile outcomes. These happen as an unintended consequence of rational self-interest. A participant in the market, Smith tells us, 'intends only his own gain and he is in this, as in many other cases, led by an invisible hand to promote an end, which was no part of his intention.'
This is the famous invisible hand. It is a metaphor for an unintended consequence. There is no hand at all, which is why it is invisible. In The Adam Smith Institute we occasionally produce mementoes of the great man including ties, mouse-mats, badges, skateboard decals, frisbees, coffee mugs and the like. One of our most popular was Spirit of the Invisible Hand whisky. On the rather ornate label we put the quotation: ‘you will be led to an end which was no part of your intention.’

The Two Types

I want to deal with two types of invisible hand to help set a tone for this Mensa colloquium. The first is the simple type, where what is achieved is an unintended consequence of what was intended. The second is where what is achieved is a larger creation, unintended, but achieved nonetheless by the cumulative impact of human action.

The first type includes Smith's original use of the term. When I buy a skateboard I intend to benefit myself and to enjoy skateboarding. I have no thought for the welfare of the shopkeeper who sells me the board, nor of the assistant who actually helps me choose one. I have little thought for the several people in developing countries who made the various parts of it or who fitted them together. They might be from several different countries and they are people I can be reasonably sure that I will never meet.

Yet when I buy that skateboard for my own benefit I do all of them a favour. They all benefit, too, even without the intention. The shopkeeper and her assistant, the person who fashioned and polished the board, he who moulded the polypropylene wheels and fitted them together and she who painted on the purple lightning flashes. All of them see their livelihood advanced a little by my action. None of them takes part in the process for my benefit, yet that invisible hand leads all of them to benefit me, just as I benefit them.

That action is particularly beneficial to the participants in developing countries. This is their means to advancement. The small part of the cash that comes their way represents a step up from the subsistence economy that was their parents' lot. When we look at the countries that have, in the last half century, made the transition from poverty to prosperity, we see plainly that it has not been the meagre handouts of foreign aid that have brought this about. It has been trade, investment and the ability to sell in other markets that have been the crucial factors.

Adam Smith was looking at cases where our actions have positive consequences, even though unintended ones. It is a remarkable arrangement that can turn self-seeking actions into altruistic ones. The American writer George Gilder wrote a celebrated book in the 1980s. It was called Wealth and Poverty and it advanced the thesis that businessmen and entrepreneurs are really virtuous. Although often derided, particularly by academics who do not make their kind of money, they are, in fact, says Gilder, high-minded and moral. Not surprisingly businessmen loved this message and bought the book in large numbers. In the process they certainly took George Gilder to wealth from poverty, probably without intending to.

In fact Gilder missed the point that Smith was making. Yes, you can be moral and upright. Yes, you can approach business activity with high-minded purposes. But you do not need to. Even if your motives are purely self-seeking the market will straighten it out. You will have to service others in order to enrich yourself. The invisible hand will make your actions virtuous even if you are not.

The bad stuff

Not all invisible hands are quite so fastidious. There are cases in which we do something for one purpose, but unintentionally achieve something quite different and quite unpleasant. The invisible hand of Smith's market economy is a good guy, but some of 'them out there' are bad news.

In many countries we insist that drivers and front seat passengers buckle up into seat belts. Our intention is to save drivers from death and injury. We succeed because their rate of death and injury goes down. Unfortunately the death and injury rate for cyclists and pedestrians goes up. Drivers wearing seat belts feel safer and drive less carefully. We do not intend to kill more cyclists and pedestrians, particularly since they do not behave any differently, but an invisible hand directs us to do that.

To save fuel and protect the environment the United States has set requirements for cars to have lower fuel consumption. The intention was to cut the use of fossil fuels and to curb pollution. The main way to achieve the average fleet targets for automobile-makers has been for them to manufacture and sell smaller vehicles. When smaller vehicles are in collisions they kill and maim more of their drivers and passengers.
We can count statistically the extra numbers killed as a result. An invisible hand has caused a government to slaughter tens of thousands of people over the years in the name of a cleaner environment and lower fuel imports.

In Britain we responded to a train crash that killed four people at Hatfield by imposing rail speed limits until all the track was inspected and upgraded. The rail service became so unreliable and tiresome that huge numbers switched to their cars. We do not know the number of rail passengers we might have saved, but it could not have approached the number of those who were killed or injured as they travelled by road instead. These we can count. A malign invisible hand led us to that unintended outcome.

When we finally respond to deep vein thrombosis on airline flights we will probably require economy class seats to be spaced further apart. This will put up the costs of air travel causing some people to opt for road trips instead. We can calculate the proportion of those who will be killed or injured. We will say once again that we intended well. But look what happened. The irony is that the car is an alternative to the 'plane for short haul flights, where the risk of DVT is minimal. As I said, not all invisible hands are friendly.

Some, indeed, target invisible victims. The French economist and philosopher, Frederic Bastiat, was born 200 years ago last month. He said that what can be seen counts for more than what cannot be seen. We put a tariff on foreign imports to protect home manufacture and we can see the jobs that are saved. What we cannot see are the jobs that disappear because their products are made more expensive as a result of those tariffs. They are the invisible victims and they suffer in silence.

The second type

It is time to cheer ourselves up by looking at the second type of invisible hand. This is the type that leads us inadvertently to create a greater thing than we intended.

On my list of 'must-read' books is a science fiction novel for teenagers. It is by Robert Heinlein and is called "The Moon is a Harsh Mistress." It tells the story of a lunar colony and its successful revolt against Earth rule to win its independence. It is good exciting stuff. I mention it here because it has one really interesting character. More and more computer-controlled systems are added to the colony's operation. They control the heating, the cooling, the air supply, the airlocks, the transport systems and so on. As more and more peripherals are added, all inter-connected... BLAMMM!!! The computer suddenly acquires consciousness. It has so much connectivity that it functions as a living brain. It decides to call itself 'Mike', after Mycroft Holmes, the smarter brother of Sherlock. It then finds common cause with the rebels.

I mention it because human beings sometimes do something similar. They trade with each other. More and more of them take part in these exchanges. They spread from local deals in the village to periodic contacts with outsiders and eventually include those who will never meet. At some point, as more and more transactions take place... BLAMMM!!! We have a market. None of those making individual deals intended this. An invisible hand led them to create something larger than they intended.

The philosopher F. A. Hayek called these products the result of human action, but not of human design. When I buy a skateboard I do not intend to create a market. Nevertheless the sum of actions like mine produces a market as an unintended consequence. The market allocates resources. It tells people where the demand is and where there are shortages. It even suggests to people what careers they should take up. None of this is on my mind when I buy a skateboard, but that invisible hand just pushes me along.

The market that I unwittingly help create is a great deal cleverer and more knowledgeable than I am. It contains and processes far more information than I could hope to assimilate and its knowledge is more immediate. By the time I collected the facts they would be out of date.

Try a mind game. Supply a city, New York, with a consumable - one variety of canned soup (tomato) for just one day next year. Make that September 17th. You must plant the required number of tomatoes and arrange for the other ingredients to be on hand. You must mine the steel and tin plate for the cans. You must cut down trees to make paper for the label and mine chemicals to make the ink. You must arrange shipping and ensure that you have convenient city outlets. It is a task of almost mind-boggling complexity, but, of course, you need not do it. The market does it every day... for a great deal more than tomato soup. It does it because huge numbers of people involved in the process are making individual transactions for their own motives: usually self-betterment. The invisible hand does the rest.
The invisible hand also creates the price mechanism. Again, it is not one of my priorities as I buy the skateboard, but my action unwittingly helps achieve it. Prices convey information. They tell us what is scarce or plentiful. They tell us where to direct our efforts far more surely than any system of 5-year plans, production quotas or forced labour. Hayek gives the example of a tin mine somewhere in Africa that runs dry.

The fall in tin output causes the price to rise. Tin is more expensive. People use less. They turn to cheaper substitutes. Previously uneconomic sources are now worth developing. No one need even know that the tin mine has run dry. The price mechanism directs people to use less tin and develop other sources. The shortage handles itself. The invisible hand is rather accomplished.

Over two decades ago we were running out of resources. Paul Ehrlich, leader of the Club of Rome, wrote a pessimistic piece urging us all to ration consumption. We had 7 years of copper left, 12 of aluminium, 20 petroleum. 'Nonsense!' said my friend, the late Julian Simon, Head of The Hudson Institute. He publicly bet Ehrlich that all the named commodities would be more plentiful and cheaper in 15 years' time. Ehrlich took him on. He lost. Simon was betting on the market to handle the situation and it did. Today we have greater reserves than were estimated earlier.

I think Hayek's most brilliant insight was that society itself is a spontaneous order. Like the market it was created by human beings, but not planned by them. Socialists used to ask if we wanted a planned society rather than random chaos. The alternative to a society planned at the centre by a few is a society planned at the periphery by the many.

As we interact, the decisions and actions of all of us spontaneously produce a vibrant, interactive, constantly-developing society. It has far more information and more input than any society planned and imposed by a few thinkers at the centre. Societies develop, said Hayek, by cultural evolution. What works, survives. What doesn't, perishes. When people trade they unintentionally produce a market. When they interact with each other they spontaneously create a society. The invisible hand leads them to create a collective entity far larger than they intended.

The lessons

Are there any lessons to be learned from this? Any guides to further action? I can see two fairly trivial ones. The first is that once we are on the lookout for unintended consequences we might be more careful. It is all very well to ban this or require that, but everything has its cost and people will behave in unpredictable ways. Calculate carefully and watch for unintentional, malign consequences.

The other lesson also implies humility. I do not mean personal humility, but greater respect for orders that have evolved spontaneously as a result of millions of inputs over decades or even centuries. That an individual can dream a superior social order is alluring: just look at the injustices of our own society. Yes... but... Collective society is a great deal cleverer than any individual. Anyone can attempt what Popper called 'piecemeal social engineering', but be careful of trying to start anew. French and Russian revolutionaries tried. They did not intend an Orwellian pigsty, but it happened nevertheless.

Let me close on a personal note by saying how much I like the spontaneous order that a free society produces. I like its variety and vibrancy. People of many races and cultures contribute. It never stagnates. It offers opportunities and comforts simultaneously. It is marvellously creative and adaptable. No one person can predict where the future will take humanity, but it seems as though we are heading towards a global society. I am an optimist. I look forward to this. I do not think that the invisible hand will lead us astray.