Chapter Sample[1]:
The Rational Actor – How Rational Are We and How Random is the World?

On Rationalism:

Industry and progress in the 19th century was based on a rationalist theory and ethic. In the 20th and 21st centuries economics, management and accountancy are still similarly rooted in a rationalist ontology. Yet the explanatory power of the rationalist paradigm has been questioned by psychology and, more recently, the branches of behavioural economics and sociological economics.

Today's economics is dominated by mathematics and accountancy yet it is underpinned by essentially behavioural theory about the choices that all of us make. As rational[2] beings human beings are 'utility maximising individuals'. As such people will consistently act in their own self-interest. We will go out there and get and acquire as much as we can for as little outlay or cost as we can. We will naturally seek to minimise the costs of activity and maximise returns on our effort, investment, time and money. The resources of time, energy, money, natural resources etc are, after all, *scarce*. Where we are not acquiring the benefits, goods and pleasures we are seeking we will, again naturally, cut our losses and expend the scarce resources of our effort, money, resources, time etc. on something more profitable and satisfying. Is this a good enough explanation of how the human species operates?

Rational choice... in love, money and everything!

Are human beings not motivated to by the utility maximising principle in branches of their lives beyond money – say in relationships, love, work or any branch of their leisure and pleasure?

Exchange theory says that yes, people are so motivated above and beyond material, economic exchange:

> *'...people enter into social relationships only if they are likely to gain a 'profit'. If a relationship becomes loss-making for either participant then he or she will withdraw and 'spend' their efforts in more profitable ways.'*[3]

[1] This essay is one chapter form a broader social theory mini-book soon to be published: "Back for the Future: A Study of Yesterday's Pioneers of Social Theory with Today's Big Issues"

[2] Rational here meaning the assessment of the best course of action using broadly scientific principles or invariance in similar circumstances

[3] Oxford Dictionary of Sociology entry on *Rational Choice Theory* refers to George Homan's and Peter Blau's work on Exchange Theory

Rationalism and rational choice theory does not, necessarily, say that people are selfish as such; in fact it can be judged to be in our (self) interests to co-operate, to love, and to share.

Exchange theory prompted yet further developments of the beneficial exchange idea into the political arena with the idea of *public choice theory*. Here electoral politics is given the aggregate, rationalist treatment. Can the polity not make political choice by constructing a raft of choices, with perceived costs and benefits attached, that enable the electorate to make a rational choice about the bundle of 'goods' that they want politicians to deploy? This makes political choice more about purposeful priorities and less about ideals or tribalism, so goes the theory.

For instance less personal taxation might be exchanged for fewer and leaner public health system (or vice versa); or a public might back pricing controls on some goods seen as partially harmful (e.g. alcohol or sugar) in order to lessen use. The public choice theory idea gained quite a bit of traction in the 1990's and has become more evident as an approach to political choice in the austerity era. It is clearly more rationalist and economically driven plus it partially explains the basis for the more marketing orientated politics of the 21st century.

Rational choice by the sovereign consumer is a first order condition for the market system to work. Yet also individual action is *socially embedded* – i.e. taking place within social systems and conditions of mutual influence, rules, and mores. Individual decision making may well be surpassed by the social architecture within which economic exchange takes place.

Individual actions are often far from rationally carried out in the most optimal interest of the person, and our social conventions can exacerbate our irrational biases and preferences.

Rationalism – limits and flaws

'There is one way to be rational and many ways to be irrational'[4]

Back in the 1970s, and for a substantial part of the 20th century, psychological consensus about the nature of a normal psychology coalesced around two under-pinning themes : a) that people were essentially rational and, b) that deviation from the norm of rational, logical thought and decision-making was explained by emotion – for instance, love, affection, sympathy, fear or hatred. Hence the *heart/head* or *gut-feel/think* ideas entered a common understanding - or myth - and these dualisms frequent our social use of psychology.

However behavioural psychology has challenged this assessment and consistently found systematic errors in judgements that we make – errors that are generally beyond our control or consciousness. Furthermore this process of *cognitive bias* and *heuristic thinking* and acting can be socially invoked or influenced rather than just a matter of individual judgement.

[4] Discussed in Dan Ariely's book *Predictably Irrational*

Cognitive bias and preferring the irrational?

Human beings are hard-wired to make judgements and find meaning. We do it all the time and mostly un-consciously. We do this for good reason. We need to act quickly; for instance in assessing danger or finding sustenance. Yet regularly we come to imperfect conclusions that are not mistakes as such but biases and partial ways of thinking and acting. Clever people do it as do not so clever ones!

Cognitive biases are ways of thinking that are sub-optimal and not entirely rational. These biases are mental habits that all of us have that are not, in all circumstances, in our best interests.

Colloquially we are all familiar with the common characterisations of cognitive bias. For instance people who we believe are 'loss averse' (Loss Aversion Bias and Sunk Cost Effect) or prone to 'wishful thinking' (Optimism Bias). We 'know' that gambling is a mug's game (Gamblers Fallacy) and that however many times heads appears when flipping a coin it makes no difference to the odds of tails appearing next. We all have heard people saying that 'I have heard it all before' (Availability Heuristic) or 'I knew that was going to happen' (Hindsight Bias). These are examples of cognitive biases.

We are also affected by the power of the group and we can be prone to 'jump on the bandwagon' (Bandwagon Effect, Groupthink). Also we may have been persuaded to do something or believe something on the basis of the context, the messenger or the place (Frame Effect). Here are some more examples and explanations.

Confirmation Bias -

Searching for and interpreting information that confirms a pre-existing belief.

Availability Heuristic -

A mental short cut or *heuristic* - i.e. a rule-of-thumb – where judgements are made about the probability of events based on how easy it is to think of examples. Consequences and a sense of the future are 'available' in memory and given greater magnitude and importance. This is an 'I can think of it so it must be important' kind of judgement.

An amusing example might be looking at the question[5]: Who is more likely to be adulterous? a) politicians or b) physicians and lawyers. You might well answer politicians. This is because this 'fact' is more available to you. Politician's affairs and peccadilloes are reported and discussed in the popular media and those of physicians and lawyers generally are not. So here we have an availability bias. By the way the answer is physicians and lawyers!

[5] As reported by Kahneman and Tversky in Kahneman, D., 2011 in *Thinking Fast and Slow*

Framing effect -

Actions and judgements based on the context of receiving information – the context of time, place, medium or the person delivering the information. A typical one is being 'taken in' by a charismatic person for instance in an interview, on the TV or in politics where one candidate appears more convincing than another irrespective of the validity, reliability or rationality of their idea, claim, proposal or message.

Optimism Bias -

This is the belief that 'good' outcomes will happen more than random chance or events over which one has no control dictates that they actually will. This generates an illusory sense of control over future events, random chance and the likelihood of desired outcomes. Related to this is the 'planning fallacy' where the benefits of a given course of action are over-estimated and costs under-estimated. Related to this is also is a pessimistic bias where undesirable outcomes are over-estimated or not considered at all again irrespective of the likelihood of bad things happening.

With an optimistic bias the mind is dealing primarily with the 'known-knowns' whilst minimising the influence of any 'known-unknowns'. Any information unknown is not considered at all[6].

Optimism bias is not to be conflated with confidence, focussed decision-making or determined effort. Rather, optimism bias is about error of judgement not deployment of effort or ability.

[6] *Ibid* 42 Kahneman, D, 2011 *Thinking Fast and Slow* 2011

Groupthink –

The tendency for individuals to take more of a risk as part of a group decision than were they faced with the same decision individually. In other words doing something as a group that you would not yourself. Related to this is the bias that because something is popular it is, *de facto,* correct and good. Most of us prefer to fit in most of the time.

Out-group Homogeneity Bias –

Members of a group see their own group members as more varied than members of another group which is perceived as homogeneous.

Irrational escalation –

Continuing with investment of effort, time money etc. in an activity that is making a loss despite new information that shows it to be loss-making or non-beneficial.

Just-World Hypothesis –

The view that the world, and particular the social world, is 'just' and broadly rational; the consequence being that anyone who is disadvantaged, 'badly done to' or lacking must be responsible for this themselves.

Fundamental Attribution Error –

This is the tendency to reason personality traits as the causes of particularly actions or behaviours over and above situational factors.

.....And finally here is one that you might be feeling around about now:

Bias Blind Spot –

Which is the tendency to think that oneself as less bias than other people!

Example Case:
The case of the Money Maker or 'The Next Big Thing':

Someone comes up with a great money making idea where 'you just can't lose' (Optimism Bias). One-by-one lots of people invest in the Next Big Thing and, at the beginning, people are making money. People are persuaded to invest more by people who appear to be confident and successful (Framing Effect). More people are then persuaded to put their money into this great idea also because their friends and neighbours are (Groupthink, Bandwagon Effect and, again Optimism Bias). The idea fails and fails badly but people stick with it for a little longer in the hope of retrieving their losses or the situation getting better (Irrational Escalation). There is no sympathy for the many people who have lost so much as

the idea failed (Just World Hypothesis). The people who persuaded everyone to invest in the first place are pilloried for their mean and manipulative behaviour and their greedy personalities (Fundamental Attribution Error).

This could be almost any failed economic bubble. It could be the housing bubble that broke western economies in 2007/8 perpetuated by the complex financial instruments invented by the banks. It could be the financial gifting pyramid that broke the Albanian economy. It could be the dot.com 'boom' that burst. Equally a scenario like this could be part of the pattern of disastrous social movements like eugenics or Nazism.

Why are we bias?

You might have thought that if human beings are broadly speaking rational would they not learn to correct bias? Or alternatively would the wonders of evolution not help us to gradually weed out this unhelpful behaviour? These questions pre-suppose that we are only rational and calculating. We are not. If we were always calculating and assessing then we would be a slow, lumbering species and instead we are fast, innovative and adaptable due to the relationship between the unconscious powerhouse of our minds and the conscious mediative tool of our conscious mind.

System one and system two

There are two 'systems'[7] at work in the brain that enable human beings to think and act.

System One	System Two
• Automatic operations • Quick • No sense of voluntary control • Uses detection, orientation • Intuitive	• Controlled operations • Slow • Effortful • Uses calculation • Deliberative

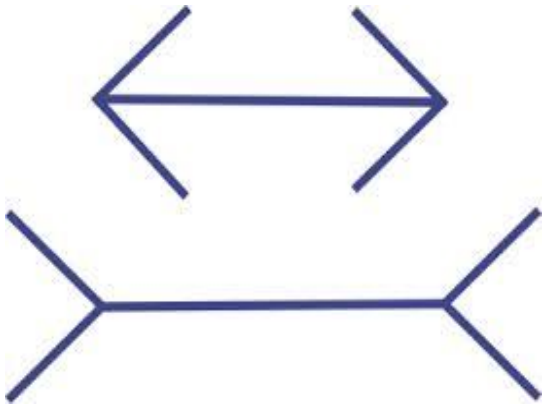
Moment by moment human beings are thinking fast. Unconscious processes in the human brain enable intention to be met and automatically orientates the person to everyday goals using perception and memory. The brain prefers these automatic responses, and when there is not one available the slower, deliberative and calculating brain kicks in. So if you

[7] *Ibid.* 42. System one and system two are metaphorical terms for the operational parts of two different sets of function of the brain. System one and system two is useful shorthand for sets of functions that are alike that call upon different parts of the brain that deal with memory, cognition and emotional response.

ask yourself what colour is the sky on a clear day? you get an automatic response. If you ask yourself what is 13 x 23 this demands a rather more calculative stop-and-think approach is required. Incidentally you might have asked yourself, with question one, what exactly is meant by 'clear' of some other such clarificatory question as your brain will automatically search out clear meaning.

Example of system one and system two thinking:

Look at the diagram below for a short time – keep your gaze short.
Which of the two horizontal lines is longer? Keep your gaze brief now!



You probably picked the bottom one as the longer horizontal line. The 'signs' straight away tell you that it is. Your brain quickly processes all the information at hand – the lines, shapes, arrows, line thickness, colour, proximity, inter-relationship etc. Your brain makes decisions based on all this data - mostly unconsciously.

But the bottom line is not longer[8]. Both horizontal lines are the same length. Your system one is overriding any calculation that your system two wants to make. Now look again. To correct this error your brain has to work hard, calculate, deliberate, iterate and re-iterate. See Appendix for the measured and correct diagram.

Why this matters

Recognising cognitive bias and the power of the irrational is important at many levels. At the individual level it has even spawned a therapeutic school[9] to try and help people eliminated cognitive biases and habitualised thinking that is not helpful to them – 're-rationalising' if you like.

It matters at the collective level if we are taking action that is irrational and riddled with error as the above example demonstrated. It matters especially when we are taking actions and making decisions that affect our future either individually or collectively.

[8] This is the 'Müller-Lyer illusion'

[9] Out of interest this is Cognitive Bias Modification Therapy. Elements of it are used in many self-help and psychological techniques especially to counter pessimistic biases and to enable better rationalisation of future action and the likelihood of positive, neutral or negative occurrences.