

# Small Bites or a Massive Chomp?

Greg Classen

A number of anomalies between measurement and expected behaviour in market research are highlighted. It is hypothesised that these anomalies might be explained by the measures being embedded in inadequate paradigms of 'being human' used in market research and that this is exacerbated by using inappropriate techniques, specifically regression analysis. A more current and scientifically supported paradigm of human nature is sketched, and a measure rooted in this paradigm is briefly examined, together with a more appropriate technique for predictive analysis. Finally, the difficulty of paradigm shifting at a personal level is mooted as an explanation for the lack of a general acceptance of measures of emotional engagement.

## **Small Bites or a Massive Chomp?**

### **Introduction**

For anyone approaching market research from a philosophy of science point of departure, there are immediately some interesting observations to be made about the marketing research endeavour at large, when it is compared to other endeavours which have the study of humans at their core.

In the context of looking at the 'new' and how the new is evaluated and assimilated, I believe a few of these observations and their implications may provide some interesting insights into the process of renewal, growth, and resistance to change within the endeavour of marketing research.

### **The Nature of the 'Being Human' Paradigm in Market Research**

#### **Why discuss paradigms at all?**

One of the key observations pertinent to this paper which may be made from a philosophy of science standpoint is that there seems to be little debate within the market research discipline about the internal nature of the subject of the discipline, the human beings who are the key components and central focus of all the studies we undertake.

There is also little debate about how the internal nature of the people we are studying may greatly influence the results of our studies in ways which we do not understand (due to the lack of debate). Importantly the lack of debate also means that there is at the moment no agreed 'paradigm' within the market research industry about how humans work. I use paradigm here in the formal sense as a 'set of assumptions, concepts, values, and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline' (Farlex, 2008). However, every measure used in market research assumes some form of view of human nature, as does every technique applied to these measures. The notion that analysis in the realm of the social could be 'value-free' as hoped by the early positivists (Comte, 1853) has been shown to be impossible as long ago as 1947 by Max Weber (Ciaffa, 1998).

What this means is that we all subscribe to some form of paradigm of human nature when we apply measures and techniques to humans, whether we think we are or not. Due to there being little discussion within the industry on paradigms, the paradigm of human nature being assumed in a particular study is rarely an explicit component of the study open to debate and agreement (or disagreement). The paradigm of human nature used becomes an implicit component of the study, free to confound measurement, the application of techniques, and eventually the results and conclusions.

## **Results of an implicit paradigm**

One of the results of the paradigm of human nature utilised by market researchers being implicitly built into the measures used and not being explicitly detailed is that the measures (and techniques applied to them) are never questioned for appropriateness from the standpoint of the most 'current' and 'up-to-date' view of the way humans work internally. Thus, the measures may be based on an 'old' or dated view of the way humans really work.

If a measure is based on an 'old' inaccurate view of the way humans work, there is the danger that the measure will not relate to the behaviour which we are attempting to understand (or more usually predict) due to a lack of connection between the measure, and the way humans really work, i.e. there is a danger that the measure does not quantify what we expect it to, or does not relate to behaviour we expect the measure to reflect. This leads to anomalies – events where the paradigm we are using leads us to expect something, and it does not happen.

## **The nature of the debate needed in market research**

In the past few years, there has been increasing acknowledgement that there should be much more discussion within the market research community about what the nature of 'being human' is, due to the power that assumptions about being human have on marketing research results through the application of measures, and the application of techniques to those measures (Gordon 2007, Heath 2001).

Going beyond recognising a need for debate, there are a number of market researchers who directly question the validity and usefulness of some of the measures, and techniques associated with the measures, which are frequently seen as fundamental to market research (Hofmeyr, 2007, Heath, 2007, Willson, 2001). These market researchers are finding, and reporting on anomalies in expected links between measurements and behaviour, and are questioning the appropriateness of some of the techniques used to analyse common measures in market research.

The two debates of underlying paradigms and anomalies in links between measures and behaviour are strongly linked. Increasingly, the anomalies of measures not linking through to what they are expected to link through to are forcing researchers to question the underlying assumptions of the measures, as well as assumptions around the nature of the expected link (i.e. questioning the underlying paradigm which gives rise to the expectations of links between measures and behaviour).

Let us examine some of the more obvious anomalies which have been debated recently. I will also refer to a common technique, regression analysis, which is used frequently in market research, in spite of evidence of it often being an inappropriate approach.

## **Anomalies in Market Research: Not Getting What You Expect**

What we do as market researchers is to spend a lot of time and effort giving clients information, often about ‘attitudes’ which we believe link through to behaviour. We hope that the information will be used to improve the client’s ‘offering’ in some way. Often, improved revenue generation (profit) is the desired end-point for the client.

If you are a client of a market research company, you will often be using the information provided by market researchers to make key decisions about resource allocation in order to maximise profit in some way. You will be assuming, as the market researcher has, that the information links through to behaviour in some way, and that by acting on the information derived from a measure, you will be able to influence the behaviour the measure is associated with in some way.

Well, increasingly, it is becoming evident that for some of the key measures we commonly use in market research, the expected link to behaviour is simply not as strong as we would expect (or hope).

The three measures I will focus on will be: purchase intent, measures of customer satisfaction, and advertising recall. A technique which is commonly used with these variables as ‘dependent’ is regression and I will briefly look at some reservations which have been expressed about the use of this technique in a market research context as well.

Hofmeyr (2007) has completed a seminal meta analysis of the relationship of measures of purchase intent, measures of customer satisfaction, and advertising recall to the actual behaviour that one would expect these measures to be associated with.

### **Purchase intent**

For purchase intention, Hofmeyr (2007) examines 10 studies ranging as far back as 1966 and finds that “the average correlation between what people say they intend to do and what they actually do, is  $R = 0.30$ ,  $R^2 = 0.09$ . In other words, 91% of the variance is not explained or is not captured by purchase intent.” The lowest R Hofmeyr (2007) found was 0.11 for high end clothing and home furnishing. The highest found was 0.65 for pharmaceuticals. Interestingly, in the pharmaceutical study, attitudes were measured and included in the prediction.

Armstrong (2001) working in the area of econometrics also examines a number of studies devoted to the relationship between intent and behaviour. His focus is the degree to which intent can be used to set an upper bound on the probability of behaviour. Although the area of focus is slightly different to that of Hofmeyr (2007), his findings are almost identical. Examining a study designed to measure the efficacy of intent (motor vehicles over a year), he finds that “the percentage of purchasers among intenders (38.6%) was higher than the percent among non-intenders (7.3%), the non-intenders were such a large

proportion of the sample (92%) that their purchases accounted for 70% of all purchases” (Armstrong, 2001).

Armstrong (2001) also finds that the act of asking people their intent changes what that intent may be. This is especially true of actions that are socially desirable, such as contributing to a charity. In our own work, we have found that people’s level of stated intent increases when the behaviour is seen to be ‘appropriate’. For example, asking people whether would they purchase a product if the product had vitamins added leads to an intent higher than that stated for the product without vitamins added. However, when doing a double blind experiment where some people are exposed to a pack with a ‘vitamins added’ sticker and others are exposed to a pack with no sticker, purchase intent is the same across the two groups.

What is interesting and noteworthy is that Armstrong (2001) accepts without a qualm that around three in five people will not do as they say they are going to, and that he then proceeds to evaluate correction factors to arrive at a ‘valid’ level of intent. This is a similar situation that we routinely find as market researchers in test markets, for example. We are forced to adopt some form of weighting or standardisation to create a figure that makes sense. It seems bizarre that we accept that the key dependent variable does not measure what it is meant to, and that we then find a way to change the variable to fit in with what experience tells us a ‘real’ value should look like (usually the weighted corrections are based on ‘norms’ obtained from what actually happened in the past).

Surely we should be looking at that figure of three in five people not doing what they say they are going to, and ask “why is this so?” What is happening in the minds of these people? If we can understand why they are not doing what they stated they intended to do, we should ask “given this understanding, is there a better measure of what people will do, other than directly asking them their intent?”

The purchase intent question is often used as the primary dependent variable in many areas of market research: advertising testing, concept and product testing, loyalty programmes, etc. Yet, it is clearly flawed, and shows a very weak relationship to behaviour.

### **Customer satisfaction**

The situation for customer satisfaction measures as a predictor of future behaviour is even worse than the situation for the purchase intent question. Hofmeyr (2007) examines 11 studies where behaviour has been monitored subsequent to customer satisfaction measures and finds that “The average correlation between customer or brand satisfaction and behaviour is  $R=0.13$ ,  $R^2 = 0.02$ .” This is quite discouraging.

Within the market research industry, the phenomenon of people who are dissatisfied staying with a brand or a service, and satisfied people ‘leaving’ or purchasing another brand has been common knowledge for some time. It is self-evident in any data where an overall measure of satisfaction (or some index of satisfaction) and brand repertoire

behaviour are measured together, for example, banking. Researchers accept that people rating a brand on the highest possible values of satisfaction indices will also probably be using other brands in addition to the brand which has received the highest possible rating.

Once again, we should be asking “why is this, and are there better measures?” rather than simply accepting the situation.

### **Advertising recall**

There have been a number of studies attempting to understand the factors that might lead to an increase in awareness (recall) of advertising (Smit 2002, Galpin 2000). All of these studies attempt to find mechanisms to increase recall of advertising in order to assist with driving up sales.

The studies assume a relationship of some sort between advertising and sales, which will not be questioned in this paper. But, they also unquestioningly assume that asking someone if they recall an advert makes this relationship explicit, i.e. they assume that advertising recall and sales are highly correlated. This assumption leads them to the belief that by managing to increase recall of adverts by uncovering and ‘tweaking’ the mechanisms of recall, they will be able to increase sales. Increased recall means increased sales.

### **Does increased recall of an advert mean increased sales for the product?**

Hofmeyr (2007) cites a meta study by Lodish *et al.*, 1995, which “showed no relationship between either recall or ‘persuasion’ and subsequent sales”, which leads him to wonder about the effectiveness of measuring recall.

Hansen *et al.* (2007) see a slightly less bleak situation for the correlation of advertising recall with sales of the product. They compare recall to a sales variable for 23 brands. They do find differences in sales between those able to recall adverts and those not able to recall adverts. What is interesting is the degree of inconsistency in the results. There are brands that show an increase in sales in spite of a low recall (with even the group claiming no recall showing a concomitant increase in sales of the product). They conclude “TV campaigns for the different brands function very differently” (Hansen *et al.*, 2007). Hansen *et al.* (2007) cite a study by MacDonald (1995 and 1996) where across 68 brands in five categories, an increase in sales related to an increase in recall can be seen in 50% of the brands being examined. Hansen *et al.* (2007) also cite a study by Hollis (1992) who found across 70 brands and 235 executions a significant short-term sales effect in 54% of the cases.

Recall seems to provide some of the picture when looking at the link between sales and advertising, but the inconsistencies and absence of relationships where relationships would be expected must lead again to the question “why is there an inconsistency, and could there be a better measure?”

## **Analysis of the Measures - Regression**

Often the measures detailed above are entered into some form of multiple regression model in order for the researcher to 'understand' the relationship of a set of independent variables and the dependent variable (overall satisfaction, intent to purchase, or advertising recall). Usually the independent variables are scaled in some way, often they are not. It is not the purpose of this paper to extensively criticise the use of multiple regression analysis, it is a powerful tool, and provided the assumptions that the technique has built into it are not violated, it can be a very useful analytic tool.

### **Assumptions required for regression analysis to be valid**

Unfortunately, some of the most basic assumptions which the technique has around data structure requirements mirror exactly the kinds of things which are just about never true of the type of data we end up working with in a market research environment. Burke (2003) details the main assumptions about the nature of the data which are frequently violated in the application of regression analysis in market research. "Causal status is given to predictors which cannot be manipulated, i.e. experimentation cannot be used for validation, convenience samples are treated as random samples. Disturbance terms are assumed to behave not as nature might produce them, but as required by the model".

There are two further assumptions underlying the technique of regression which are routinely ignored when the technique is used on the type of data generated by a market research survey. These are: the assumption that the scales used as inputs are 'true' scales, and the assumption that the distribution of the scale reflects the normal distribution, including a lack of outliers (Miles *et al.*, 2001). We assume in market research that the distance between a 4 and 5 on a 10-point agree / disagree scale (one) is exactly the same as the distance between a 9 and 10 (one) on the same scale. We know that is probably not the case.

When humans use scales, not all of the scale points are treated as equidistant at all. When Correspondence Analysis is used to graphically display the distance between scale points in order to provide an idea of the relative weights of the points (Greenacre, 1984) it is almost always the case that scale movement on the extremes carry more weight than scale movement in the 'centre' of the scale. As for the requirement of a normal distribution, anyone who has spent time in analysis in market research will know that it is especially unusual to find a normal distribution in any scale we use, and that this is especially true in the area of customer satisfaction. Scale results tend to be clustered at one end of the scale (negative or positive) and not the middle of the scale as a normal distribution would require.

Berk (2003) concludes "regression has too often been applied to answer questions for which it was ill-equipped. Misinformed science and policy are the inevitable result".

As all of the authors acknowledge, there are ways around all of the problematic assumptions involved in using regression analysis. The question that needs to be asked,

as for the ‘measures’ above is “is there not something better, and if there is, why is this technique still so entrenched?”.

### **Are There Better Measures?**

Well, the short answer is, “yes, there are”. But, before the measures are detailed, we should examine why the current measures are not performing as they should. This takes us to the ‘nature’ of being human. As I have already indicated, meaningful measures should be rooted in a paradigm of humanity which is as accurate as the best of what we know right now enables us to be. If the measures flow from the paradigm which details humanity the best, then they will be aligned with the overt behaviour that the paradigm underpins.

### **What is the Nature of Being Human?**

Everyone has a paradigm of what being human is. Our expectations of people and our interpretation of everyday events in all the interactions we have all reference the way we view people (our internal paradigm). However, it is uncommon for people to try to access and understand their own personal paradigm of the way they, and other people work. For most, if one had to ask “what is your paradigm of the nature of being human?” there would not be an immediate answer. Mostly, the response would be that the paradigm was obvious, there would also be an assumption that the paradigm was pretty much the same as yours if you asked the question. A shared system that enabled both of you to communicate, interact with others, and understand each other.

As researchers, our underlying paradigm of the nature of humanity determines the way we approach research. The questions we ask (or don’t), the way we look at data, and the way we explain what we find in data, are all determined by this underlying view of the ‘way things work’.

### **How things ‘work’ for humans**

Let us briefly look at some of the most recent information about the ‘way things work’ for humans. There has been much progress in this area in the last few years and as with many disciplines where there are sudden leaps in knowledge, the insights come from advances in other, sometimes seemingly unrelated fields. The field which has contributed hugely to a deeper and fuller understanding of being human has been that of cognitive neuroscience.

Cognitive neuroscience is a body of knowledge being gathered at the intersection of neuropsychology which is the “study of the effect of illness and trauma on the nervous system” (Page, *et al.*, 2006) and brain imaging. The use of “functional magnetic resonance imaging (fMRI)” (Page, *et al.*, 2006) enables the researcher to link neural activity to particular tasks the respondent is performing, or particular thoughts which the respondent is asked to think, or stimuli that the respondent is shown.

There has been an explosion of information from the field of cognitive neuroscience over the last few years. The results are not without controversy, and it is agreed that the techniques “can tell that a piece of brain is active whenever a person says they are thinking or experiencing a particular thing; but they cannot tell us why that bit of brain is active or what piece of the mental process that brain area is actually doing” (Page, *et al.*, 2006). Thus, the interpretation of what may, or may not, be happening as a result of the brain activity is still somewhat subject to debate and conjecture.

Pinker (2007) refers to this possible difference and subjectivity in the interpretation of brain activity as the “easy problem and the hard problem”. The hard problem is attempting to explain how subjective experience and ‘consciousness’ arise from neural activity – trying to understand the ‘I’ in ‘I am’ would, I guess, be a good analogy. There is a possibility that this will never become an area where there is agreement. The easy problem according to Pinker (2007) is the ability to “distinguish conscious from unconscious mental computation”.

### **The conscious and the unconscious**

The ease of this distinction between conscious and unconscious thought using fMRI is key to the argument in this paper. Due to the ease of telling the two processes apart (conscious and unconscious), there is much information available about when mental processing is unconscious, and when mental processing is conscious.

Consciousness turns out to be “a maelstrom of events distributed across the brain” (Pinker, 2007). When ‘consciousness’ is used in an active manner to interrogate the brain, neurons ‘light up’ all over the brain. Although the specific interrelations between the areas in which processing is taking place, and the reason for the different areas being activated are debatable, there is complete agreement as to when a ‘conscious’ process is being observed. Conversely, when a process is unconscious e.g. breathing without consciously thinking about it, almost no neurons are active. The brain is on ‘autopilot’ and is relying on neural pathways which bypass consciousness to make decisions and control behaviour.

It would be impossible, due to the degree of activity that the brain would have to enter into, for humans to be consciously processing even a fraction of what they are exposed to. So, most of the decision-making which happens in the brain is in fact not a ‘decision’ at all. A pre-existing pathway is used and this pathway is ‘wired’ into the unconscious.

### **Making choices and decisions**

Let us turn from the obvious part of the unconscious pathway discussion which we all accept involves little conscious activity (for example, autonomous breathing) and have a brief look at the choices people appear to make and how the phenomena of unconscious pathways may influence these decisions.

Pieters *et al.* (1999), observing the length of time it takes people to arrive a brand choice in a shopping situation, find that “on average most purchase decision are made fully in less than five seconds”. This is from the person stopping at a particular area to the completion of the choice by the person. Scriven (2006) takes this finding even further. Using FMRI, he found that between a person observing a set of products to the person taking the product selected off the shelf, there was a time lapse of seven seconds. What is even more fascinating is that he found that when brain behaviour unrelated to the ‘mental’ choice of product (e.g. brain behaviour related to eye movements, hand eye co-ordination, grasping, etc.) was excluded from the analysis of brain activity, only seven neurons were left unaccounted for. These were the neurons used to make the actual brand choice. There are, in fact, too few neurons ‘firing’ for there to be a choice in the sense of what we conventionally understand a choice to be. The choice was in fact simply an impulse following a pre-defined pathway. The person did not consciously think about alternatives or weigh up benefits, and there was no modelling of needs versus any product intrinsic, in either the conscious or unconscious brain. In both sets of instances, there was simply not enough time for anything else other than a pre-programmed pathway to be activated and followed based on the stimulus of the shop shelf.

Hofmeyr (2007) puts this well – “In sum: we are heuristic decision-makers. We may sometimes feel that we’re agonising over a decision. But mostly we decide fast and effectively; with minimal use of energy and little reference to multiple attributes”. It simply makes intrinsic sense. We would not have survived as a species if we extensively pondered just about every decision we needed to make, and then repeated this process every time we needed to make the same kind of decision.

Even when there are not pre-existing pathways and alternatives have to be evaluated, the process is still largely unconscious (i.e. not accessible to the conscious mind) and (usually) very fast. Gigerenzer *et al.* (1999) introduce the notion of satisficing as an explanation of how humans make decisions among alternatives. When evaluating alternatives, we use very little information, possibly only two or three attributes and provided this information generally ties into our ‘feeling’ about what we require, the object is chosen. Satisficing refers to the notion that we do not seek a perfect solution among the alternatives. Given the amount of things competing for ‘conscious’ time, the quickest solution that links through to a feeling of ‘OK’ is chosen on as little information as possible, and we move on.

Once again, this is a process which assists us to survive in a busy world.

### **Completing the paradigm of being human**

Three questions need to be answered to complete our ‘paradigm’ of humanity. How are these heuristic pathways created (can they be understood or influenced), how do the pathways relate to ‘satisficing’ when alternatives need to be evaluated, and how are the pathways ‘experienced’ by the person making the choice?

## **The creation of decision ‘pathways’**

How are pathways which are not reflexive like breathing built? The answer is obvious enough – through learning. People are constantly bombarded by messaging and information, not just about brands, about everything. This bombardment begins at birth and ends with death. During the socialisation process of any person, components of this bombardment are associated in the unconscious and contextualised within the emotional framework that the person was currently experiencing. Hansen (2007) finds that five- to seven-year-olds know on average 500 brand names which in his view “constitutes a significant proportion of their vocabulary”. Once these unconscious associations are built, they are experienced as emotions reflecting the matrix of associations around the particular image or event. Hansen calls these emotional associations ‘cognitive elements’ (Hansen, 2007).

## **Satisficing**

The emotional links and associations (cognitive elements) explain the nature of ‘satisficing’. Hansen (2007) estimates that in the average industrialised country, the number of consumer orientated stimuli received by the average person is around 3000 per day. Regardless of the real number, in any given society there is no doubt that it is large. Also large are the number of consumer choices that any person needs to make on a daily basis. Due to the fact that cognitive elements are linked by associations in the brain, rather than a fixed one on one link, any particular stimulation will be able to engender the emotions associated with any number of the cognitive elements. This is due to the associative nature of the links as opposed to a ‘direct’ link. Satisficing happens when the stimulation, whatever it may be, finds alignment with one, or some of the cognitive elements. In other words, the alternatives in a choice are not fully evaluated at all; at best they are compared based on the underlying emotions the associations they are linked to engender. They are ‘classified’ in terms of existing cognitive elements and the emotions associated with them. The one which aligns roughly the best is the ‘chosen’ one. Our choices (satisficing) are the net outcome of emotional associations based on prior experience which is reflected in memory.

## **The way humans experience ‘pathways’ or emotional associations**

These emotional associations are unconscious and largely inaccessible to the conscious. For Hansen (2007), the unconscious emotional associations are reflected in feelings. For Damasio (2003), “Emotions were probably set in evolution before the dawn of consciousness and surface in each of us as a result of inducers we do not recognise consciously, on the other hand feelings perform the ultimate and longer lasting effects in the theatre of the conscious mind”. So, emotions occur to us through the responses they create and some of these will be feelings-based (as opposed to autonomous, e.g. increase in heartbeat). The feelings linked to the emotional associations when the decision is not directly ‘programmed’ in the unconscious are what create the sense of alignment in the choice. What Gigerenzer (1999) calls satisficing. That sense of ‘rightness’ in a decision we all feel at times.

## **Can emotional associations be changed?**

The situation as discussed now assumes that as the emotional associations, or cognitive elements, are formed, they become a static part of the unconscious to be either directly acted upon without more than a few neurons being engaged, or to be drawn on when alternatives need to be evaluated through satisficing, or new experience and stimuli assimilated.

The immediate consideration would be the thought that as new experiences are evaluated in the light of existing associations, the nature of the emotion associated with the stimuli would be influenced by the new experience, even with the brain satisficing and using heuristic paths and classifications. This is self-evident. Take for example, the case of a sports car. Emotional associations reflected as feelings could be things like a sense of power (emotional) giving rise to a feeling of freedom. However, if the person had to witness a sports car travelling too fast and running a red traffic light and causing a bad collision as a result, the sense could easily be influenced to be one of danger (emotional) reflected in a feeling of discomfort when seeing a sports car.

This means that the emotional associations may be influenced to a degree by current experience. For Lou Tice (2003), the degree of influence is a balance between the amount of conditioning or socialisation that has already taken place, and the impact (emotional size) that the new stimulus has. The corollary being that the more ingrained the emotional associations are, the more likely that the behaviour associated with them, and the choices reflected as a result of them, will be completely 'unconscious'. This ties into the notion that it is almost impossible to change the brand behaviour of people who have a strong psychological association with a brand, but that 'forced trial' (when the product of choice is not available and an alternative has to be found) is probably the most likely way to create the experiential environment that can induce people to change (Hofmeyr, *et al.*, 2000).

So, the emotional associations largely engendering our choice behaviour are continuously mediated by current experience.

Another phenomenon has been found to influence these emotional associations. People's actual memory of events does not remain unaltered over time; each time an event is remembered, the event is different for the person recalling the event. Zaltman (2003) has shown recall is reconstructive and that the nature of what is remembered, and how it 'appears' to a person can be influenced by things as simple as the way in which the question prompting the memory is asked. The person 'reconstructing' the memory will not be aware of the change, nor will the person be aware that the next time the memory is accessed the recall will be different. This is termed the 'reconstructive nature of memory' (Braun-Latour, 2006).

For our immediate purposes, the question of whether the memory is altered unconsciously as the brain 'tidies' anomalies, or whether the act of remembering

something alters the memory is not important. The insight is that the memory on which emotional associations are based is not immutable. The assimilation of current phenomena and the act of remembering at all change the memory and by default the emotional associations linked with it.

### **Creating a convenient name for a complex process**

For the purposes of convenience, for this paper, I'd like to term the phenomena of reconstructive memory combined with current experience having an effect on emotional associations which are themselves products of prior reconstructions of experience, and exposure to experience, 'phenomenological reconstruction'. Reconstruction for obvious reasons – the re-creation of memory, and phenomenological due to the concept that if every person's memory is constantly reconstructed and mediated by experience, each and every person is going to end up with a unique set of memories, and more importantly, emotional associations based on those memories and exposure to new phenomena.

As a result of this, in order to obtain an understanding of the person's behaviour, one would need to understand the person's feelings (remember emotional associations are expressed as feelings which lead to behaviour). Due to the uniqueness of the emotional associations, the feelings leading to behaviour can only be understood from 'inside' the person, i.e. you would need to see the stimuli from the person's point of view to understand feelings and emotions about the stimuli. This method of understanding is 'phenomenological' (Schutz, 1932) since it has to be linked directly to understanding the 'life world' of the person from within.

Phenomenological reconstruction explains a phenomenon which has been puzzling for a long time. How can two people experience the same event, and yet have completely different feelings about the event? They may even describe the event differently even when referring to the 'hard' facts of the event. Since the world of every person is structured uniquely by that person's mind, it is obvious that the same stimuli will be encountered, understood and acted on differently by different people. It is the reason why we can sit next to someone in a film and hate every second while the other person loves every second. The 'reality' of the film is interpreted and understood differently and thus the behaviour (in this case loving or hating the film) is different.

### **A Summary of Major Insights from Phenomenological Reconstruction, and Some Implications**

There are a number of insights which are useful for us in the examination of the measures and techniques in market research detailed earlier. A full examination of all implications is simply beyond this paper since the insights apply to every sphere of interaction in life for every person.

## **The importance of the unconscious**

The first and overwhelming insight is the importance of the unconscious in decision-making (indeed many, if not most, decisions are so unconscious that the 'decision' is already pre-programmed).

Since the unconscious is by its nature 'unconscious', this means that there is little point in asking people overtly what their intention is. People simply cannot predict what they are going to do, and do not rationally know why they have done many of the things they have. Being polite and probably believing in their own 'paradigm of themselves' or their own 'truth' that they are rational, people will try to give the researcher a projection and an explanation. In the words of Wendy Gordon (2006), "Hard science shows us that heuristics (mental shortcuts) determine many of our decisions about brands without our conscious deliberation and that 'reasons why' are often post- rather than pre-rationalisations".

The ineffective results when using the measure 'intent' and when looking at 'satisfaction' described earlier can be explained by this paradigm. The rational simply does not dominate the emotional at any stage. Any practising psychologist will be able to tell you that a person's first intent on encountering a significant 'other' in the arms of another is to leave the relationship and not return. When the real emotions kick in, this almost never happens - the unconscious accumulation and reinforcement of all the 'good' desirable interactions initially simply outweigh even the huge trauma of betrayal.

The act of attempting to access measures directly from the conscious mind by overtly asking them will often engender a post-rationalisation. It would seem that the best we can do is access information about the stimuli (brands say) at a general level of 'feeling'.

## **The primacy of 'feelings' and the presence of ambivalence**

The second major insight is that emotional associations which are not possible for the person to articulate (or even access) largely drive behaviour through feelings about stimuli. These associations work in a heuristic, 'satisficing' manner.

The implication of this is that everything in the person's unconscious is relative to everything else, due to differential associations, and that feelings about equal stimuli (similar brands or services, for example) may be ambivalent due to the different associations which are engendered by the stimuli. The general 'feeling' engendered in the person would be equal desire – literally torn between alternatives without knowing (rationally) why. It happens often to all of us in every sphere of life. So, in areas where we are attempting to understand behaviour which we would usually access by asking measures such as 'intent' and 'satisfaction' apart from having to focus on feelings, we also need to understand these feelings in a relative context in order to get some idea of the degree of ambivalence which might be reflected in the feelings engendered in the person by the emotional associations (Hofmeyr and Rice, 2000).

## **Our ‘reality’ is uniquely ours**

The third major insight is that everyone’s internal world is unique. This uniqueness is due to the reconstruction of memory, and to each person being exposed to just about an infinite variety of stimuli over time. These stimuli are differently interpreted by each person in the light of their own unconscious emotional associations. Schutz (1932) coined the term ‘life world’ to represent this unique interpretation and reconstruction of reality. The life world of each person is private - their own unique creation. Due to this uniqueness, the world can only be understood from ‘within’ from the person’s own view. This can be done by accessing the person’s general feelings engendered by the emotional associations which reflect the ‘reality’ of their internal world.

One of the most pervasive implications of this is that if we have usable measures which link into feelings reflected by emotional associations, and through this into behaviour, any modelling, or analysis, must happen at the level of the person (as each person is completely unique).

## **Putting the insights together to look at implications for advertising recall**

How do the insights above apply to the last measure discussed earlier, that of advertising recall as a measure of sales or potential sales? The situation here is more complex than the clear-cut inappropriateness of intent and satisfaction measures.

The work cited earlier in this paper must lead one to conclude that measuring advertising recall definitely does link through to sales in some way, with what seems about half of all adverts tested using advertising recall as a measure demonstrating some link to sales. However, the success is only partial.

Advertising recall is a rational thing. You are asking someone to specifically remember an event. Yet, we know that there are influences in the unconscious (associations and emotions) which the person will not be able to recall or access, which affect behaviour through the feelings generated by these influences. So, as with other measures, ‘feelings’ engendered by the unconscious need to be included in the measure (or be the measure).

The work of Heath is invaluable in assisting with adding the missing components to advertising recall. Accepting the primacy of the unconscious, Heath (2001) differentiates between explicit learning and implicit learning; the first is conscious and the second is unconscious but both affect underlying associations and hence feelings. He further recognises that in looking at the effect of advertising, one needs to take account of this unconscious processing, and the effect that it has on behaviour.

Heath *et al.* (2006) take account of ‘unconscious’ processing by differentiating between levels of emotional engagement and levels of conscious attention in the process of assimilating advertising. Heath *et al.* (2006) go on to show that the relationship between

the two can be independent, i.e. there is no relationship between levels of attention and levels of engagement, neither needs to be present for the other (but they can coincide).

Knowing that it is the emotional engagement which is key, as that engagement is going to be assimilated and acted on by the underlying emotional associations which give rise to feelings which carry through to behaviour, it could be argued (Heath (2007)) that the part of the 'conscious' measurement of advertising that works (i.e. that rough 50% that is linked through to sales) is the part where the underlying emotional engagement that may affect behaviour coincides with conscious attention (i.e. the advert is consciously recalled).

### **The need for understanding unconscious engagement**

The common notion that runs through the insights and implications above is that of understanding 'unconscious engagement' as a necessary condition for understanding anything about humans. Measures that do not take unconscious engagement into account are all flawed in some way as we have demonstrated for the three measures chosen here – satisfaction, intent, and advertising recall.

This notion of the need to measure unconscious engagement in an effective way links directly through to the 'human paradigm' of reconstructive phenomenology. Knowing what measure we would need to have as a 'meaningful' dependent variable that is linked through to behaviour due to it reflecting the most 'up-to-date' paradigm of being human we have access to, we can now turn to the question of whether there are better measures (or a better measure) for the three 'conscious' measures we have shown to be ineffective.

### **Are There Better Measures?**

Yes, there are better measures, often a single measure or a set of measures, which are claimed to link through to some definition or form of unconscious engagement. These measures are usually detailed together with the degree of correlation the measure has with actual behaviour. In all the instances I have examined, the claimed correlations with behaviour are by far better than anything achieved by any evaluation I have had access to on satisfaction, intent, and advertising recall.

For many years, market research practitioners working in the area of unconscious engagement had to be particular about what they showed at conferences, and what they published, due to the competitive advantage which they enjoyed by using measures which reflected the degree of emotional engagement their respondents had with their clients' products or services. There was also little literature in the public domain.

This has changed. The importance of creating a measure of unconscious engagement which rests on an appropriate paradigm of being human, and which can subsequently be used to 'really' understand and possibly predict behaviour has been acknowledged by most, if not all of the largest market research companies. Some of these companies have gone as far as to explicitly put measures of unconscious engagement at the core of their

prime approaches or products. There is also an exploding body of literature on the subject (both at the level of ‘measurement’ and at the level of discussion around the paradigm).

The prestigious Advertising Research Foundation has recognised the importance of measuring unconscious engagement and in 2007 produced a summary of all of the measures which could be found by them which are claimed to relate to unconscious engagement.

In no particular order, I list some of these below:

**Figure 1: Market Research Company and Emotional Engagement Approach**

Company	Product or Approach
BrainJuicer	FaceTrace
Ameritest	Casablanca
Gallup and Robinson	Impact Copy Testing
Millward Brown	Dynamic Tracking
	D&A
	Cross-Media
NeuroFocus, Inc.	Effective Coordinate System
TiVo	Stop    Watch
NewMediaMetrics	Patented research approach to emotional attachment
Roy Morgan	Natural Exposure
	Live Exposure
	TV Monitor
	The Reactor
Cymfony	A structured hierarchical approach to measuring brand engagement
Nielsen	Buzzmetrics
Satmetrix Systems	Net Promoter
Synovate	Brand Engagement, brand value and sales: a new measurement and prediction system
Taylor Nelson Sofres	Brand Performance Optimiser
	Market Contact Audit
	The Conversion Model
	FutureView
	NeedScope

Source: Advertising Research Foundation (2007)

The degree of claimed correlation with the measures and behaviour was not included with the analysis performed by ARF (2007). Obviously, this is a key variable needed to understand the power of the measures. What is immediately apparent though, are the number of companies and the number of approaches. The debate and the methodological

insight about measuring unconscious engagement have moved from the esoteric into the open public forum in a massive way.

The extensive debate which I am sure is possible, on the relative merits of the different measures and approaches is beyond the scope of this paper. What is abundantly clear is that there are many measures of emotional engagement and all correlate to some degree with actual behaviour. The ‘some degree’ being in all the cases where I can access the correlation better than is achieved with the measures: intent, satisfaction, and advertising recall.

### **What about the Techniques Used to Understand the Measure/s?**

Are there better techniques available for the analysis of dependent variables such as the ones which measure emotional engagement than regression?

Again, the answer is “yes”.

#### **Targeted bootstrapping**

The technique of ‘bootstrapping’ has been known to statisticians for years; it was discovered by Efron in 1979 (Efron, 1979). In a nutshell, the technique involves re-sampling the original data set many times randomly but with replacement. ‘Pseudo’ data sets are created and these through many iterations (i.e. the re-sampling taking place thousands or millions of times) will enable the statistician to accurately calculate the parameters of any set of measures in the original data. Typically, this technique is used to estimate errors around measures of dispersion in data (Davidson, *et al.*, 2003).

Until recently, due to the computational requirements, this technique was not easily available to researchers in a commercial environment.

Wilson, *et al.* (2001) add the notion of a ‘target’ to the bootstrapping method to arrive at ‘targeted bootstrapping’. In their words, “the modified bootstrapping method needed to be able to deal with (assumed) changes in the data, typified by the what if question: if one or more predictor variables (Xs) were to increase or (decrease) by an amount what would happen to the dependent variable (Y)?”. In the simplest terms, a target of some kind is set for a variable or group of variables. Through a re-sampling process, the final sample is made to match as closely as possible the parameters set by the users for the ‘changed’ variable or variables. This process is replicated many times and finally “The parameters of the distribution of the shifts for each variable are reported in a summary statistics table” (Wilson, *et al.*, 2001).

I will show an example shortly.

With the insights generated by targeted bootstrapping’s relying only on the data and re-sampling without any theoretical modelling needed, the technique is so simple that as Wilson *et al.* (2001) put it, “What sometimes surprises readers is how such a simple

approach can overcome such apparently complex problems. It seems almost too good to be true”.

The authors are referring to the fact that targeted bootstrapping has none of the limitations and constraints associated with regression. So, the technique is not affected by outliers and it makes almost no assumptions about underlying distributions or scales (indeed there are no parametric assumptions at all); even the fundamental assumption of most modelling techniques that the underlying data is linear, is absent.

### **Putting Measures and Technique Together**

If we accept some of the implications of the paradigm of humanity which has been detailed, and we also accept that there are measures which directly link through to it and as a result are highly correlated with behaviour and finally, we also accept that there are techniques which can provide good insights in a profoundly simple way – what can be achieved?

I will briefly provide a few examples from our own work. I am sure that others working in this area will have similar ones.

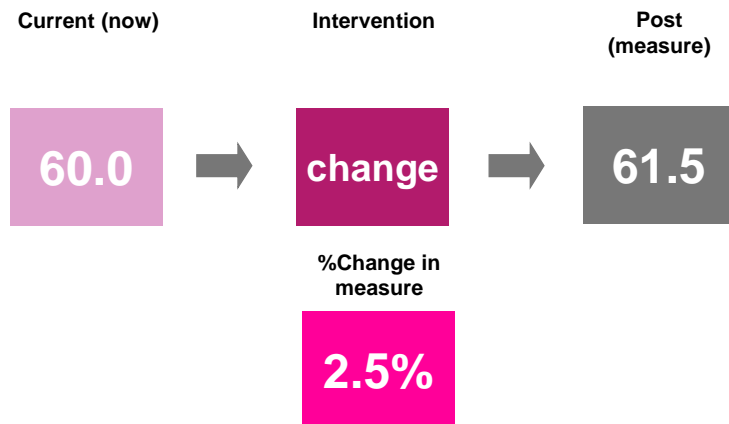
#### **Emotional engagement at work**

Firstly, an example of the power of a measure which is based on emotive associations and engagement. This is a test which was done to assess the impact of a change in pack on a consumer product. The emotive measure was derived before exposure to the product, and after exposure to the product. The measure is obviously at the ‘brand’ level as that is where the emotional engagement is, i.e. there was no focus on the pack change itself in the experiment, only on ‘feelings’ about the brand.

The results are below:

## Figure 2: Example of a Measure of Emotional Engagement in Action

### Example 1: Product test: change in emotive association measure



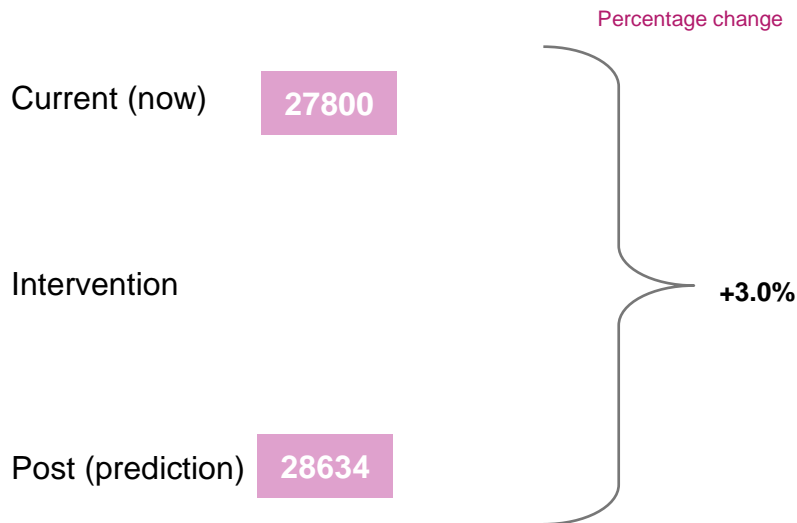
The measure sums to one hundred and it can be seen that exposure to the pack has had a positive effect on the sample overall as the measure has increased from 60.0 to 61.5, a change of 2.5%.

In this category, the correlation of the measure with behaviour (share of wallet allocated to the brand) is known. The correlation is 0.81. As a part of the survey, we also measured the total weekly volume of the product consumed by each person in the survey. By multiplying the proportion of change in the emotive engagement measure by the consumption of the individual respondent for the week, and then summing the differences, we can arrive at a predicted change in weekly volume due to the change in emotional engagement.

The result is:

### Figure 3: Example of a Measure of Emotional Engagement Linked to Volume

#### Example 2: Volume Projections: units and percentage



1

One can see that the weekly volume change is predicted as an increase of 3%. The volume change does not match the percentage change in the emotive engagement measure as there are different profiles of heavy vs. light users in the data. In this particular instance, heavier users were obviously more engaged by the new pack since the volume increase is higher than the share increase.

#### Combining emotional engagement with bootstrapping

What can be expected from a measure of emotional engagement when it is combined with targeted bootstrapping?

In this example, respondents' emotional engagement with a brand was measured. They were then exposed to a set of advertisements, one of which was obviously for the brand we were interested in. After exposure, their emotional engagement was again measured. Respondents were also asked a set of associative statements about the brand as it was portrayed in the advert. Once again, there was no focus on the advert itself, only on the brand, as that is where the emotional engagement was going to be enacted.

The dependent variable is the percentage change in the emotional engagement variable between the pre- and the post-test, and what we are obviously looking for is which of the

attributes associated with the brand in the advert have the biggest contribution in maximising this difference.

The way this was done was to use targeted bootstrapping to create a scenario where the attribute score for each attribute was increased by 10% and the subsequent increase in the percentage difference in the pre- / post-emotional engagement variable was observed. The attributes whose ‘movement’ creates the largest change in the percentage difference variable are the attributes which are responsible for the increase in the emotional engagement levels of the brand (on average, there was a 4% increase in emotional engagement for the sample, i.e. the advert was successful in increasing emotional engagement).

In other words, we are using the percentage positive change in the engagement measure to rank the attributes by their contribution to the brand’s engagement with the respondent.

Results are below for five attributes:

**Figure 4: Example of a Measure of Emotional Engagement and Targeted Bootstrapping**

Attribute	% difference : post-engagement measure – pre-engagement measure
Packaging is appealing	11.1
Consistent and reliable	9.3
Excellent coverage	6.2
Easy to open	2.8
For old people	-2.2

In all these examples, we have clear results that we know relate directly through to behaviour due to the high correlation of the emotional engagement variable with behaviour. The results are based on a complex construct, but can be presented simply and have obvious implications.

### **What Happens in the Real World?**

We would appear to have a really interesting (possibly even compelling) set of results based on a new, and apparently most useful technique, linked to a dependent variable which is extremely powerful and useful due to its known correlation with behaviour, in this instance the behaviour being ‘share of wallet’ allocated to the brand.

Yet, in the real world of market research, one seldom sees these kinds of results, or these kinds of measures. It is something that many working in this area of emotional engagement puzzle over. There seems to me to be some congruence in the nature of their mooted explanations for their puzzlement (sometimes frustration).

Heath (2007) muses: “We hypothesise that the IP model [the model an emotive engagement view of advertising would replace] has retained its dominance not because it works, but because it appears to make the advertising process verbal, rational, measurable, and subject to conscious control. It fits both our organisational value systems and the fiction of a rational consumer, as part of an Enlightenment world view. Any other model is regarded as dissonant with these deeply held values, and is therefore either rejected as ‘soft’ and ineffectual, or as excessively powerful in a sinister way”. Conner (2005) finds that marketers in general have not examined the effectiveness of their market research programmes in delivering information on emotional drivers of behaviour even when they acknowledge the importance of emotional drivers: “Many marketers nod their heads without examining whether they have made a serious attempt to include emotion in their plans” (Conner, 2005).

Hofmeyr (2007) spends some time on the lack of penetration of the paradigm of emotive engagement, both within the market research industry and within the client base of the industry. He finds himself “frustrated in that I’ve struggled to get my own colleagues to accept improved metrics” and finds that with clients, he has been “confronted by a refusal to change even when a valid transition can be mapped out” (Hofmeyr, 2007).

Hofmeyr (2007) goes on to raise three culture changes which are needed if the industry is to become a knowledge-based industry: an acceptance that knowledge marches on, “at the corporate level: a commitment to the development of corporate processes which allow for the smooth transition of old lines of business to the new” (Hofmeyr 2007) and finally, an appeal to individuals to try to understand difficult metric systems and to have a “desire to be at the forefront of knowledge development” (Hofmeyr, 2007).

### **Our own experience**

We have over the years encountered exactly what Heath, Conner and Hofmeyr have in our goal of placing emotive engagement measures at the heart of every survey we do (and of basing as much of the work we do as is possible on the reconstructive phenomenological paradigm). We have also alienated some clients, some friends and some colleagues. I have also pondered on the difficulty of getting people to use measures which seem to have blindingly obvious benefits above any other form of measure currently available and which are based on sound insights obtained from cutting edge science.

I have one insight in this area which is quite simple, and which may help. Our clients and our colleagues are not stupid (usually) nor are they lazy, or obstinately obstructive (usually). Given this, there has to be something else that must happen for these measures to become the norm, rather than the exception, other than people having to ‘make an effort’. There must also be something other than ‘lack of effort’ that is preventing people from using the new knowledge and new measures.

Why is the need for change so obvious, yet so difficult to implement?

## **The Difficulty of Change of Knowledge for Individuals**

How do people assimilate new knowledge, and how does knowledge itself 'proceed'?

We have already dealt with the first question, in a way. New knowledge is simply another one of the hundreds of thousands of different kinds of stimuli which bombard every person every day. Following the notion of stimuli almost exclusively being categorised and acted on at an unconscious level, existing associations and emotional connections in memory will be used to almost instantaneously align the stimulus with something already 'pathed' in the unconscious, if possible.

The more 'supported' or 'layered' the associations and emotional connections, the faster the classification or categorisation, and the more 'unconscious' the behaviour linked to the feeling, the emotional connections engender will be. How often are we consciously aware of the decision we make to apply the brake when we approach a red traffic light? Hardly ever, we do it in the 'background' while we talk to people in the vehicle and observe our surroundings.

The above is all good and well and explains the behaviour associated with stimuli which support and reinforce the emotional associations which are already an integral part of the unconscious. What happens when we have some form of stimuli presented to us which at a fundamental level contradicts almost everything which is contained in the emotional associations which have been layered and reinforced in the unconscious over possibly decades?

### **Stimuli that contradict internal belief**

The answer is provided by the work of the Pacific Institute (Tice, 2003). At the primary level of consciousness, the contradictory stimuli are often simply not 'seen', i.e. the depth of the unconscious programming and the emotional associations that result is so great that although the stimuli may be noted by one of the senses in a 'conscious' way, there is simply no engagement. This is typically why in infidelity, the partner is often the last person to find out. The stimuli associated with infidelity are (usually) so far removed from the person's internal world view of the relationship that signs that may be blindly obvious to others are simply not 'seen' or are 'classified' into an existing association.

What is happening is that the person's own internal 'truth', that 'life world' of Schutz (1932), is so far removed from the stimuli that the person's unconscious denies the stimuli as 'not real'. The degree of alignment is so far out of kilter that the unconscious will not tolerate the potential dissonance of so much internal 'truth' being invalid in the light of a single stimulus. The coping mechanism is unconscious denial and the behaviour is simply not 'seeing' the stimuli, or classifying the stimulus into an existing emotional association inappropriately.

An example of this kind of stark (and seemingly improbable) behaviour is evident in the counselling of anorexics. An anorexic's internal view, their 'life world' is completely out

of kilter with the 'reality' of what is happening to them, and their body. Showing the objective truth and explaining it does no more than lead to 'not seeing' and argument around the definition of 'normal' i.e. 'real'. Continuing the discussion may even lead to complete overt rejection of the reality in an explosive manner (Malson, 1998).

Think of any discussion where internal worlds or 'truths' which have been layered and reinforced over a long period and which are in conflict are the topic: religion, politics, and sport, for example. The discussion rarely ends up being a dialogue and some of the worst conflicts ever seen revolve around these 'internal' unconsciously reinforced life worlds, and people's inability to 'see' other viewpoints which fundamentally contradict their view.

### **Is there no possibility of change?**

Tice (2003) has found a method which can alter the unconscious emotional associations which are layered over time. The method is 'continual affirmation' (Tice, 2003). The only way to alter unconscious associations at the individual level is to, over a period of time, continually reinforce and repeat the 'new'. Two things may possibly engender change or 'seeing' the new – eventually, over time, the old associations and emotions will 'fade' and be replaced by the information being continually affirmed ('brainwashing' works this way). Or, as the stimuli around the knowledge being affirmed are presented in different forms, the person may arrive at a sudden insight, an 'aha' moment of change. This happens by linking associations and emotions in a different way to how the person usually does due to some difference in the way the stimuli are presented, or some change in the emotional matrix in which the stimuli are shown. The 'cognitive elements' (Hansen 2007) are associated in a 'non-normal' way.

Unless 'new' knowledge is congruent with the emotional associations a person already has and can be 'classified' within the person's internal life world, the knowledge will not be assimilated, it will be ignored, not 'seen', or denied. The only way around this is continual affirmation.

### **What of the World at Large and the Progress of Knowledge?**

There are two conflicting views of how knowledge proceeds in the world. The notion of verisimilitude was coined by Popper (1934). In this view, there is some form of ultimate truth to which 'science' is moving and each bit of new knowledge brings a body of theory closer to the truth. Theories which are different from each other may be evaluated by reference to their degree of verisimilitude. Apart from the notion of verisimilitude, Popper also gave us the method of falsification as the way science should proceed. This gave rise to the 'null hypothesis' way of doing science which many of us still use, and which anyone doing any form of 'science' was trained in (Popper, 1934).

An alternative view is held by Khun (1962) who believed that it was impossible for scientists to evaluate other paradigms, or sets of theories competing with theirs as what scientists actually see is determined by the paradigm they are operating in. Any

discussion between people operating in different paradigms inevitably ends up in a breakdown of communication between the people entering into the discussion. In the words of Khun (1962), “What we see is different depending on our point of view: there is no common ground to enable discussion and comparison of theories to begin, because all our possible experience is a product of our theories”. In the world of knowledge growth, the internal truth of individuals also drives what they actually perceive reality to be, and how reality may be interrogated.

How does science then ‘proceed’ for Khun if everyone is bound by their theoretical framework? How does change happen (and we know science does change - everything revolving about the earth to earth revolving about the sun, flat world to round world, Newton to Einstein, etc.). Among the main considerations for Khun (1962) were anomalies, and other fields of scientific endeavour. No body of theory being applied to ‘reality’ as a set of measures is without anomalies. The anomalies are ignored or not seen by most for reasons already discussed, and are tolerated by those aware and concerned about them as they rarely affect the ‘day-to-day’ business of scientific enquiry, and ‘doing’ within the paradigm. For example, one of the ‘laws’ of our current Einsteinian paradigm used in physics is that the speed of light is an ultimate barrier. Well, recently particles have been found travelling faster than the speed of light. Planes still fly and the sun still rises – normal science continues.

Eventually though, the increasing number or ‘weight’ of the anomalies created by the views and methods of the paradigm mean that something has to ‘give’. (Obviously as well, the greater the number of anomalies, the greater the probability of a new discovery explaining them.) The breakpoint is often inspired by developments in other areas of endeavour, which might not be strongly related to the area of endeavour experiencing anomalies. However; the developments are influential in addressing the anomalies.

As the anomalies are not explainable by the existing paradigm, the way that they are usually explained in the view of Khun (1962) is by a completely new paradigm. This new paradigm will have a completely different set of rules to the ‘old’ paradigm. Khun terms this a ‘paradigm shift’ (Khun 1962). The new paradigm explains everything the old paradigm did, as well as the anomalies that the old paradigm did not. There is no notion of approaching ‘ultimate truth’, the rules of understanding the world simply change. Once the scientist is working in the ‘new’ paradigm (i.e. the paradigm shift has happened), the ‘new truth’ is again ‘obvious’, even though before the paradigm shift, the new truth was completely inaccessible to most.

For Khun (1962), “though the world does not change with a change of paradigm, the scientist afterward works in a different world”.

### **How does ‘science’ really proceed?**

If you subscribe to the paradigm of reconstructive phenomenology, whichever view of science proceeding you believe in will depend on your own experience and training. The debate is still ongoing.

The historical evidence tends to support both views, to a degree. In periods of ‘normal’ science, knowledge moves toward confirming and supporting the current paradigm and nobody except a few bother about the anomalies. This is an obvious thing to have happen since the paradigm guides the way in which people are measuring and understanding the ‘world’ so the results are consistent with the paradigm. This is ‘normal’ science and verisimilitude applies. However, more and more anomalies are ‘uncovered’ by the methods of the paradigm during a period of verisimilitude and at some point, an explanation that covers the anomalies arises, or is discovered. There is then a paradigm shift, followed by the resumption of normal science.

### **An example**

A brief example may make things clearer. Consider the concept of the earth as flat, which in the 1490’s in Spain was the current paradigm (it is apparent that the ancient Greeks knew the earth was round but that the knowledge had been lost in the interim).

Let us look at a compressed version of the ‘legend’ of Columbus. Due to developments in shipping technology leading to seafarers having more confidence sailing out of the sight of land, Columbus was convinced that the time was appropriate to try for a quicker route to the Far East by going in the ‘other’ direction than usual traders did (directly out to sea and into the unknown), due to ancient maps showing that it might be a quicker route. He managed to convince Isabella the Queen of Spain of the possibility of the approach and she provided him with three (new) ships to try this route, even though she thought he was crazy.

After a set of four voyages, Columbus returns to Spain, arriving from the opposite direction to which he left. Ergo – round world (an accidental discovery). He explains this to the Queen over breakfast and asks for a bonus. The Queen being quick and clever tells Columbus that it was obvious that the earth was round, and that there would thus be no bonus. Columbus (legend has it) picks up an egg and asks the queen to make the egg stand on its narrow end. After a few futile tries, the Queen tells Columbus that it is impossible. Columbus takes the egg, taps on the narrow end with a spoon for a while until it finely cracks in many places but does not break. He then stands the egg on its narrow end. The queen looks at him and says “That was obvious”. Columbus replies, “Madame, everything is obvious when you know how”.

For decades after the ‘discovery’ made by Columbus, most of the rest of the inhabitants of the world continued to believe in the flat earth paradigm. There are still some who do so today. They have a web community and are not jokesters, their belief really is that the earth is flat, and their argument for it is hard to fault unless you are able to take a trip into space yourself to make sure!

In this brief sketch, we have everything. Anomalies, someone with different beliefs challenging an existing paradigm, developments in other fields assisting knowledge generation, a discovery that explains anomalies, people having an ‘aha’ moment and

understanding, and finally, people who resist and deny (and continue to do so), and also life just going on. To most readers who are not travelling in space, if the flat worlders are correct and a round earth is history's biggest conspiracy, nothing will actually change except attitudes. For the sincere flat earthers, by now nothing will induce a paradigm shift, probably not even a trip into space to 'see'.

### **What is the Relevance of All of This?**

I would contend that in market research, we are at the cusp of a complete paradigm shift where the 'aha' moment is going to be a fundamental shift from a focus on the conscious and rational to a focus on the unconscious and emotional associations. This paradigm shift will be increasingly supported by very accurate insights from the world of 'hard' science and by our own ongoing work within the industry on emotional engagement.

The simple insight of the primacy of unconscious emotional associations will not be the current or 'dominant' paradigm in market research until just about every person in the marketing and market research environment undergoes a fundamental change in the way they view themselves, their life, their interactions, and their work.

Paradoxically, it is more difficult for us as market researchers to change paradigms. As in all paradigm shifts, the world will still look the same and the sun will still rise and planes will fly. However, the world we work in is 'us' i.e. we are both the subject, the object, and the observer within our endeavour. Looking at Khun's quote on the world of the scientist being different after a paradigm shift, it is obvious that due to 'us' being the world of the market research practitioner, we will in fact be different. The paradigm shift to the primacy of emotional associations will completely change our internal life world, i.e. our 'truth' will be different and the way we look at the world and ourselves will be different.

For many people, this paradigm change, and the restructuring of the internal life world necessary to take this knowledge into account in their deepest emotional associations, will be really difficult. For many, possibly the most difficult 'internal' change they have ever made.

I think much more is required than courage to change, willingness to learn, and a will to aim for truth organisationally. A paradigm shift is required at a personal level and this is often almost impossible. What is needed from those in the 'new' paradigm of humanity is constant and patient questioning around the anomalies in the old paradigm, combined with constant and patient communication and affirmation of the 'new' paradigm to an audience we should expect to be often negative, and sometimes combative, until they find an 'aha' moment in the ongoing affirmation of the 'new' paradigm.

It is the practitioners in the new paradigm who need the courage to persevere rather than the practitioners in the 'old' who need the courage to change. Change is easy when the route is obvious, and it is the obligation of those working in the new paradigm who have

the interest of the industry at heart to find those 'obvious' connections and draw people into the new paradigm through patient and constant affirmation.

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