Quantitative and qualitative research

Perceptual foundations

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The way in which quantitative research and qualitative research are conventionally contrasted with each other runs along familiar lines – the former is seen as offering 'hard', 'factual' data, while the latter is depicted as softer, as providing deeper insight, but at the expense of being necessarily more 'interpretivist' and 'subjective' in its approach. Seldom is it recognised that this way of distinguishing the two methodologies is, in fact, rooted in our quantitatively determined beliefs about human experience. This paper aims to uncover these assumptions and to identify how they are rooted in our underlying preconceptions about the perceptual process itself. It outlines a new platform upon which the distinction between quantitative and qualitative research can be established and which links the latter with semiotics.

Introduction

The distinctions between quantitative and qualitative market research are well rehearsed. The former measures phenomena such as brand awareness, brand penetration, product preferences, etc., and elicits numbers and percentages that, at least within the constraints of a given sample, have the status of 'facts'. Qualitative market research, in contrast, is used when more 'in depth' understanding of consumer attitudes, behaviour and motivations is required.

The quantitative search for 'facts' can be usefully thought of as a series of 'what?' questions (e.g. *what* number or percentage of people prefer product 'A' to product 'B', or *what* number of people in a given population have drunk beer in the past week). In contrast, qualitative research is almost universally associated with 'why?' questions that reference its emergence in motivational research and the suggestion that we can get to 'deeper' levels through such interrogative strategies.

These distinctions between 'what?' and 'why?' questions are also reflected in the academic world. Although approaches such as Discourse Analysis (Potter & Wetherell 1987) and Grounded Theory (Glaser & Strauss 2006) certainly extend the scope and aims of qualitative research, and do go

Received (in revised form): 28 November 2014

DOI: 10.2501/IJMR-2015-070

beyond a psychologically driven understanding of 'attitudes and behaviours', there still remains a widespread belief that eliciting consumer motivations is about understanding the psychological forces that act on an individual.

In the course of this paper this conventional distinction between 'what?' questions and 'why?' questions will be challenged, and the case will be made that another, potentially more effective, dichotomy should replace it. In the course of the argument it will be shown that conventional qualitative market research is, in many ways, still rooted in a fascination with 'what?' questions and that this opens it up to the charge of being 'in depth' quantitative research in several respects. By moving away from this model, and establishing a new way of differentiating qualitative from quantitative research, this paper will look at some of the underlying philosophical differences between the two. In particular, it will consider the extent to which qualitative and quantitative research can, and should, be differentiated at the level of our theories of perception. This is an area that is hardly ever considered as a basis for such discussions.

An analysis of a new theoretical basis for qualitative research will also allow this paper to place many of the qualitative techniques used in the commercial sector on a new theoretical footing. Projective techniques are seldom discussed in the academic literature and are often viewed in the commercial sector as simply useful ways of facilitating conversation. It will be shown, in contrast, that they have strong foundations rooted in the revised understanding of qualitative theory outlined in the course of this discussion.

Quantitative and qualitative research: conventional distinctions

In any quantitative research project, the task is to establish a 'representation' of what consumers do or what consumers think; we try to establish behavioural and mental 'facts'. When such a 'copy' of reality is created in data form, then we inevitably want to know whether this 'representation' is a 'true' one. This leads us into issues of validity and objectivity. In this context, quantitative research has a firm intellectual platform that derives from the physical sciences. Building on centuries of developments in statistics, there is broad agreement in the research community about our use of quantitative analysis tools, and the criteria we should use to ensure that data is both valid and reliable.

The position of qualitative research is more ambiguous. The relevance of the 'what?'/'why?' distinction immediately becomes apparent when we consider what qualitative research actually does *in practice*. Although it overtly seeks to understand *why* consumers think or behave in certain ways, it almost always insists on a prior need to identify *what* consumers think and do.

This feels like a perfectly normal procedure to all qualitative researchers. So we also begin by providing a description, or a *representation*, that *corresponds* to the mental disposition and actions of consumers. It is only when we have established this initial landscape that we feel entitled to enquire about the 'whys?' – in other words, the deeper motivations of the consumer mind-set.

So does qualitative research have an equivalent theoretical platform to statistics? In response to this question, proponents of qualitative research adopt an interesting approach. Still entangled in the desire to provide an accurate account of the consumer mind-set, qualitative researchers often argue that their methodology (smaller samples, but more depth) yields what can only be described as 'better mental facts'. These are the ones that are thought to lie at a more subconscious level, and that can be reached only through prolonged discussion and analysis. It is argued that qualitative research should therefore differentiate itself by 'getting under the surface' of rational consumer responses to another and deeper layer – in other words, *what respondents really think*. Such a claim effectively suggests that qualitative research can outdo quantitative research at its own game and, by asking better 'what?' questions, reach a better understanding of these 'mental facts'.

As I have discussed in a previous paper (Barnham 2012), this is a position that is fraught with difficulty, for it puts forward the notion that it is possible to give an account of what is *really* going on at the subjective level – to give an account of essentially what can be described as the 'objective subjective'. This is a position that has been critiqued by many other authors (e.g. Radford 2005; Volosinov 2012) because it clearly involves an inherent contradiction in terms.

Seldom, however, do qualitative researchers really challenge the implicit assumption that we should be trying to establish 'mental facts'. This remains a natural part of the qualitative process. It is, of course, perfectly possible for qualitative research to record *what* consumers say they think – and to do this in a way that is often more detailed than quantitative research. But to assume that this is a sufficient source of differentiation for qualitative research is to grossly underplay the potential benefits of the methodology. And, as we know, it immediately leads to questions about validity.

It will be argued in the course of this paper that the point of differentiation for qualitative research lies at a completely different level. As we shall see, its main task should be to establish *how* consumers think rather than to provide a more detailed account of *what* consumers think. The importance of this distinction cannot be overstated. It fundamentally shifts the ground of the debate about qualitative research and its inherent validity. For if we are evaluating *how* consumers think, then we are no longer seeking to discover 'mental facts' as such; instead we are seeking to identify the mental structures

that consumers use to describe and understand their world. We turn our attention from an attempt to give a valid *representation* of *what* respondents think, and replace it with the very different task of establishing the mental 'rules' and 'distinctions' that consumers utilise when thinking. And these lie on the surface – they are not buried in any putative 'subconscious'.

But before we look at these distinctions in detail, we need to briefly consider how the problem of qualitative validity is conventionally addressed.

Qualitative validity: conventional solutions

As we saw above, if we want to identify apparent 'mental facts' then this will lead us to the question of how to establish the validity of those facts. In quantitative research, as we have seen, this already exists in the form of statistics. But no such theoretical solution seems to exist in qualitative research. The methodology is widely seen as a useful research technique and it can certainly be helpful in understanding consumers, but it appears to lack an underlying philosophy of science (Sykes 1990). It neither seems possible to demonstrate what a qualitative research 'fact' is, nor is qualitative research capable of providing data that is replicable in other studies. Findings vary from project to project and from researcher to researcher. All we are able to offer the client is 'interpretation' and, while this is sometimes very useful, interpretation is always viewed as being just that – essentially a construction in the mind of the researcher (Willis 2007).

In the commercial sector of qualitative research there is little attempt to question the underlying model of 'mental facts'. We have tended to stress, instead, the usefulness of the methodology. In the academic sphere there is, however, a greater need to establish a foundation for the validity of qualitative research. In brief summary, there are a number of approaches that have been adopted.

- First, we can make qualitative research seem more 'objective'. We can, for example, adopt the technique of 'triangulation' – enabling the use of different researchers, samples, time frames, methodological approaches, etc., to provide us with greater faith in the qualitative findings. If the findings from different studies tend to confirm one another then we conclude that there is more objective 'truth' in them (Ereaut 2002; Flick 2002).

- Second, we can change the status of the methodological goal that qualitative research is setting itself. Instead of seeking absolute 'objectivity'

in our findings, we can build on the notion of 'utility' and adopt those findings that prove the most useful in understanding a particular problem. This approach acknowledges that 'objective truth' is not achievable as such, but asserts that some findings are better than others when explaining consumer reality. Through an iterative process we can fine-tune our understanding via hypothesis generation and testing. Over time we will arrive at theories that are a better 'fit' with reality and explain it more effectively. Gadamer's concept of the 'hermeneutic circle' typifies this kind of approach (Gadamer 1975) and also has links to the philosophical school of pragmatism (Ayer 1968).

- Third, we can take the philosophical high ground and argue that qualitative research is not in the business of trying to establish 'objective' truth at all. We can take what is called a 'phenomenological' stance and argue that the qualitative task is to give an account of how respondents see the world *from their point of view*. The role of qualitative research is still to give an account of the underlying consumer disposition, but this is now framed as being just from the point of view of the respondent. No attempt is made to establish whether this view is 'correct' or more 'objective'. Berger and Luckmann (1967), for example, talk in terms of the 'social construction of reality'.

These theoretical solutions, therefore, seek either to find a way of making qualitative research appear more 'objective' or they attempt to get around the issue by making their accounts not subject to the criterion of objectivity. All, however, are still working within a framework that seeks to establish a *representation* of consumer reality in some form or other. They still want an account of *what* the consumer thinks in a way that corresponds to how things are in their mental world.

Few of these conventional approaches to qualitative validity consider the possibility that the differences between quantitative and qualitative research may exist along the specific dimension of distinguishing *what* consumers think from the business of *how* they think. And none of these accounts certainly goes so far as to link the latter possibility with our underlying model of perception.

In the next sections of this paper it will be shown how these two dominant models of market research can be seen to differ at the level of our models of perception. In doing so, this paper will point towards key underlying differences between quantitative and qualitative research and suggest a stronger theoretical platform for the latter.

The 'quantitative model of perception' and its methodological consequences

The very idea that there could be such a thing as a 'quantitative model of perception' is one that will strike the reader as surprising. This reaction, in fact, strikes at the very heart of our problem when distinguishing quantitative research from qualitative research. What we have here, if you will forgive the pun, is a 'blind spot' in our theory of human cognition. We tend to assume that the way that human beings perceive the world is a 'given' and that, as a result, it is methodologically *neutral*. Nothing, however, could be further from the truth.

The quantitative model of perception is, not surprisingly, the one that dominates our conventional way of understanding our experiential processes, and acts, more extensively, as an underpinning of scientific methodology. So what are its assumptions and what sort of model is it?

It is no coincidence that our modern account of perception emerged in the 17th century – at the same time as Cartesian Dualism (Descartes 1984) was becoming established and as quantitative scientific theory began to dominate. It assumes a model of reality in which we, as subjective individuals, inhabit a world of three-dimensional objects. The critical aspect of this model is that we, as conscious human beings, are detached from the world and look upon it *as if from the outside*. This is what fundamentally determines our need for *representational* accounts of reality and the pursuit of objectivity that we encountered earlier.

One critical aspect of this framework is that objects in the outside world are deemed to be passive. Although forces obviously impact upon objects, and they move around, this is not a world where they are forces *themselves*. In philosophical terms they are not 'animistic'; they do not have 'agendas' (Latour 1993). As a result, we do not believe we experience them because of their action upon us – but rather because we (the only active forces allowed in Descartes' model) experience them *through our acts of perception*. The fundamental effect of construing perception in this manner is that our experience of the world is inevitably, and necessarily, broken down into our individual perceptual acts. Each of our perceptions has a specific content and it is separate from the other perceptions that we experience. It follows from this that we cannot, for example, have a perception that contains two different qualities at the same time – it would have to be, by definition, two separate perceptions.

In philosophical terms, the consequences of this model are enormous. For it follows that, if all of our perceptions of the world are fragmented, then we cannot 'see' the connections between them. This leads directly to

the philosophical problems of induction, causation and identity that have beset modern philosophy. The problem, of course, is that we cannot 'see' the connections between our perceptions, *by definition*. If we could 'see' such a connection then it would yield another, separate, perception, and then we would need to find the connection between the original perception and the newly perceived 'connection'. This model of separated perceptions is thus deeply flawed. It leads us to the sceptical conclusion that we cannot see reality as it actually is – only as a series of separated sense data.

Scientists and quantitative market researchers could safely ignore this problem of perception (and leave it for philosophers to muse upon) except for the fact that, paradoxically, it forms the basis for their very methodologies. In the 18th century, while the sensible approach would have been to reject this inadequate model of perception, western thought took a decisive turn and actively decided to work within it. Given that this model does not allow us to see the connections between our perceptions, then we need to find some way of overcoming this dilemma. At this point quantitative science discovers its historic role (Hacking 1975). As a methodology it allows us to count the phenomena we experience in the world and to identify the connections (or incidences) that exist between perceptions. Using statistics we can then establish (through inference rather than perception) which of these 'incidences' are 'real'. This data can then be used to construct the 'account', or representational 'copy', of the world that we pursue.

Two key criteria, of course, need to be satisfied in order for this approach to work. First, we need to count the incidences in conditions that are controlled – otherwise incidences that seem to be meaningful may, in fact, be driven by external conditions. This is certainly the case in the physical sciences and it also holds true in a quantitative research context. This is why quantitative respondents are not allowed to influence one another. Second, we need to have enough incidences in the data to count their conjunctions in a meaningful way. This is what drives the need for base sizes that are large enough to allow patterns of conjunctions to emerge in a way that we can believe are 'real'. Both of these criteria – controlled conditions and large base sizes – are fundamentally determined by the underlying assumptions of the quantitative model and the core belief that our starting point is one of fragmented perceptual experience. It is wholly misguided to apply these two criteria to qualitative research. They make sense, in a research context, only if we still chase the quantitative ambition of establishing 'mental facts'.

In a quantitative context, however, we have here a methodology that gives us the confidence (indeed, the statistical confidence …) to believe

What are the underlying assumptions about our experience of the world?	We can only experience the world as a series of separated perceptions
What is the underlying methodological assumption?	We cannot assume, 'a priori', that any of our perceptions are in fact connected in the real world
What, therefore, is the underlying methodological task?	To establish the connections that we assume actually do exist
How do we do this?	We can count particular phenomena and the level of *incidence* that they have with other phenomena
What is the Latin root?	'Quanto' – how many?
In practical terms, what do we need to have to achieve this?	Sufficiently large base sizes, controlled conditions and the correct application of statistics

Figure 1 Key tenets of the quantitative model

that we can see *beyond* our subjective experience. Ironically, in our modern culture, this methodology is nearly always portrayed as a triumph of the human intellect. In fact, the truth is a lot less exciting – it is simply the only practical way of establishing empirical knowledge given the rather flawed model of perception that dualism has imposed upon us.

When this mind-set is applied to the key tenets of quantitative methodology, a number of points emerge. These are summarised in Figure 1.

When this quantitative way of thinking is considered in diagrammatic terms, we usually create patterns of side tabs and cross tabs in our data sets. We thus quantify different phenomena along different axes and identify where the incidences occur. This model of data analysis is the dominant mode in quantitative research and in the quantitative sciences – for the very reason that it enables us to identify incidences in the phenomena that we experience. In a market research context, it provides us with the confidence to believe that we have truly discovered *what* consumers think.

A 'qualitative' model of perception?

Is there an equivalent model of perception that can form the basis for qualitative research? Interestingly, we find that such a model does exist within western philosophy. Its origins are in Greek philosophy and it dominated western thinking until the 17th century, when it was replaced by the 'quantitative' view of perception discussed above. The model then disappears from view for 300 years until it is articulated again by C.S. Peirce (Boler 1963; Deely 1994; Short 2007) at the end of the 19th century. This American philosopher is most often associated with semiotics and is considered one of its founding fathers, alongside Saussure. There is no small significance in this link to semiotics, but I will leave aside the implications of this in the following discussion. Instead, I will briefly

outline Peirce's theory of perception and contrast it with the quantitative account described above. This comparison can provide, as we shall see, a perceptual basis for an alternative account of qualitative theory.

The Peircean model of perception begins with assumptions that are diametrically opposed to its quantitative equivalent. It makes the radical assumption that *our experience of the world is unified – everything that we perceive is connected to everything else*. This transforms the nature of what perceptions are – they are mentally 'picked out' of the perceptual continuum, *after they have been experienced*, instead of entering our minds *as already fragmented units*.

As a result of this, Peirce distinguishes between the content of a perception (he calls this a 'percept') and the mental action (or 'perceptual judgment') that picks it out. As an example, I see a chair that is 'yellow'. The 'yellowness' forms the 'percept', but it is the 'perceptual judgment' that actually makes it a perception of that colour. Peirce argues that the intellectual act in the 'perceptual judgment' is one of comparison. The mind grasps that the colour is 'yellow' by determining that it is not 'red', 'blue', 'orange', etc., and also that it is like other 'yellow' things that have been seen in the past:

> The perceptual judgment 'This chair appears yellow' has vaguely in mind a whole lot of yellow things, of which some have been seen, and no end of others may be or might be seen; and what it means to say is, 'Take any thing you like, and you will find, on comparing it with this chair, that they agree pretty well with this color'. (C.S. Peirce 1931–35, 7.632)

The colour of the chair is, therefore, relationally defined. And, most importantly, the yellowness comes to exist only as a synthesis of the percept and the mental action contained in the 'perceptual judgment'. Not only are our perceptions, therefore, linked to one another in the perceptual continuum; they are also defined with reference to one another in the perceptual act. This forms the theoretical underpinning for the triadic structure of the sign with which Peirce is most frequently and famously associated (Murphey 1961; Bernstein 1964; Almeder 1980).

This account of perception is transformatory. It means that what things *are* is relationally determined by what they are *not*. And at the heart of perception we have a *classificatory* process that defines our experiences in terms of 'what sorts of things' they are.

This clearly has significant implications for qualitative researchers. We seek to understand our respondents' experiences of reality and these can now be construed in a relational way. This insight is particularly pertinent when we come to consider social phenomena – the main focus of qualitative research.

We are all defined by our culture and by our relationships with one another. We experience the social world relationally and cannot, for example, be 'mothers' or 'sons', 'daughters' or 'bosses' without the corresponding notions of 'children', 'parents' or 'employees'. We are *defined by* our relationships with one another. This is also true, significantly, of brands. We know that brands possess their meanings and values because of the competitive set that exists around them. A brand, for example, can be seen as 'unhealthy' or 'old fashioned' simply because of the arrival of a new player in a market. Brands exist, like individuals in a society, as purely relational entities that reflect the perceptual model outlined above.

The Peircean perceptual model: is it qualitative?

This Peircean model of perception gives us the opportunity to establish an equivalent to the quantitative theory that we have discussed above. Because it assumes that all of our perceptions are connected to one another, the methodological questions that it generates are very different from those incurred in the quantitative model. As we have seen, instead of assuming fragmentation and separation, it assumes unity and connectedness.

This model has significant implications for qualitative research. For, if we apply this way of construing perception to qualitative research, our focus is drawn to different types of research question. How do consumers make *distinctions*? How do they *classify* things? How do they create *separations in their perceptual continuum*? This results in further questions that are already very familiar to qualitative researchers. How do consumers 'slice up' the world? How do they frame concepts? There seems to be a *prima facie* convergence here between the Peircean perceptual model and the types of question asked by qualitative researchers.

The methodological task, therefore, becomes one of understanding how respondents classify their perceptions and this is, I would argue, at the theoretical root of qualitative research. Discovering how respondents make distinctions in their experience and how they differentiate between phenomena should be the ambition of qualitative researchers. Crucially, this means that we should attempt to understand *how* consumers think (i.e. what mental structures or 'perceptual judgments' they employ) rather than focus on *what* they think. In other words, we should look for the underlying 'rules' behind consumer attitudes and behaviours.

As I have discussed in a previous paper (Barnham 2010), the links between this *modus operandi* and qualitative research also run deeper in other ways. If we refer to the English dictionary, we will find that the

What are the underlying assumptions about our experience of the world?	We can experience the world only as a perceptual continuum
What is the underlying methodological assumption?	We can assume, 'a priori', that all of our perceptions are connected, in some way or other, to one another and are, therefore, relational
What, therefore, is the underlying methodological task?	To establish how respondents divide up their experience of the world through their 'perceptual judgments'
How do we do this?	We identify how consumers make distinctions and make comparisons in their world
What is the Latin root?	'Qualis?' – what sort of?
In practical terms, what do we need to do to achieve this?	?

Figure 2 Key tenets of the qualitative model

origin of the word 'qualitative' resides in the word 'qualis', which means 'what kind of' or 'what sort of'. Qualitative research thus shows some etymological indications of being a *classificatory* way of thinking about the world, and this reflects the notion that what things are, and how our meanings are created, is derived from the way we make distinctions. By way of context, it is also interesting to note that the French sociologist Pierre Bourdieu established an entire philosophy of sociology upon the insight that social structures are based on our ability to make distinctions (Bourdieu 1977). Indeed, his most famous work was entitled *Distinction* (Bourdieu 1984), although I am not aware that he ever linked this back to the etymological origins of qualitative research itself.

Equipped with this new way of thinking, however, we are now in a position to revisit Figure 1 and, based on the Peircean model of perception, identify the parallel assumptions of the qualitative research model. We can see in Figure 2 how different they are to the quantitative equivalent – indeed, they are almost diametrically opposed to each other.

Qualitative methodology reframed

In Figure 2, there is a question mark that represents qualitative research methodology. What sorts of research activity could be positioned in this apparently empty space? What is the qualitative equivalent of the 'counting of incidences' in quantitative research?

As we have discussed, we are no longer trying to establish 'mental facts'. Instead, we have now identified that we are trying to understand *how* consumers make distinctions in their world via their perceptual judgments. Some readers might argue that this is a low ambition and that quantitative research is right to seek out the 'hard' facts that identify *what* consumers

think. But, commercial qualitative research needs to discover *how* consumers create meaning and this should be its purpose for its clients. After all, understanding the 'rules' of a market enables them to create added value.

So what do qualitative researchers do? In line with the theory above, we seek to identify how consumers 'split up', or 'classify', their world. In any qualitative interview or group discussion we already do this at a number of levels. These stretch from the basic task of asking open-ended questions through to the use of projective techniques. All of these approaches will be familiar to readers – the 'empty' space is, in fact, already full with qualitative techniques that enjoy methodological success, but that have hitherto seemed to lack an overt theoretical foundation.

Asking open-ended questions

Even at the basic level of asking questions, we find that the word 'qualis' often has a role to play. When, for example, we enquire how respondents feel about a particular experience, such as going to the supermarket, we know that it is useful to ask open-ended questions. These types of question are characterised by the fact that they allow respondents to say 'what the experience *is like*'. The word 'like' is important here – we are implicitly asking consumers to make their own comparisons (and distinctions). The well-asked open-ended question is, therefore, often an enquiry into how consumers make classifications – an invitation to say *what sort of thing* an experience is (or is not) and to describe their 'perceptual judgment'.

Not all open-ended questions, clearly, ask consumers to do this, but it is surprising how many of them implicitly do so. They allow respondents to tell us about their own mental categories rather than asking them to use 'ours'. The latter phenomenon is, of course, exactly what happens in quantitative research. Practitioners of quantitative methodologies find themselves having to assume, on a systematic basis, that respondents mean the same things by the same words in order to make sense of their data. However, five minutes in a group discussion can usually relieve one of this illusion.

Replacing 'why?' questions

As a profession that has its roots in motivational research, we are always encouraged to ask 'why?' questions. We believe that, by asking such questions, we will uncover the motivations for a particular consumer act or brand choice. As experienced researchers, however, we recognise that

respondents are often not able to tell us 'why' they do something (Gordon 2011) and, even if they do so, they may simply give us a post-rationalisation of their decision-making process. In many instances it is much more useful, instead, to ask a 'what kind of?' question. This is a more indirect method of asking consumers to explain their motivations. For example, if we ask a consumer why he or she plays football, they may provide some rational reasons. If we ask, instead, *what sort of* activity is playing football – the respondent will place football in the world of other activities and sports and will reveal *how* they think about it and *how* it is different from these other activities. These distinctions will often allow us to uncover their underlying reasons for playing the game.

Framing

The notion of 'framing' has become topical in recent years – it is one of several platforms that have informed the rise of behavioural economics (Thaler & Sunstein 2009; Gordon 2011; Whitehall Hayter 2014). In light of our discussion, however, we can now see that 'framing' is simply another way of describing the 'qualis?' question. It is a concept that encourages us to analyse *how* consumers think about a product or a brand and the contextual framework that they use when they think about *what sort of* thing it is. Framing thus informs positioning and reaffirms that everything in the social realm (including brands) is relational. Thaler and Sunstein argue that framing 'matters in many domains' (2009, p. 39), which is a slight understatement in light of our above discussion. It is quite apparent that the framing process is fundamentally how consumers construct their worlds. It is the mechanism that determines and underpins all meaning creation.

Projective techniques

At a deeper methodological level, we can also see that many of the techniques that qualitative researchers use in groups and depth interviews are, in fact, simple manifestations of the 'qualis?' question. Projective techniques are very familiar in the research world (Gordon & Langmaid 1988; Chrzanowska 2002; Keegan 2009). Almost without exception, however, they have been understood as purely *psychological methods* (or even simply 'games') to enable consumers to project their subconscious feelings in a less inhibited manner. Academics have seldom discussed them in much detail, but have tried, on occasion, to assess their validity and

reliability (Boddy 2005). Such techniques are hardly ever seen, however, as a fundamental facet of qualitative *analysis* that allows us to identify how consumers break down their perceptual continuum.

These techniques, familiar to readers, are briefly summarised below, but can now be reframed in the light of our discussion.

Mapping exercises

These are conventionally understood as a way of seeing how a market is segmented, but in fact are better construed as a technique for establishing how consumers split up a *concept*. If we map the lager market, for example, we are asking consumers 'what sorts of lagers' there are, how do they *distinguish* between them and what *defines* the edges of various sub-sectors?

Mood boards

We often find in consumer research that respondents use a word with multiple meanings – it is, in the terminology of Wendy Gordon, a 'fat word' (Gordon 1999). Using mood boards, however, we can identify how consumers can split this word and identify the various meanings within it. All of the words for the multiple types of 'service' in our culture do not exist in the dictionary. We only have the basic 'fat word' of 'service' to work with. But we can show consumers different images of 'service' on a mood board and they will be able to identify *what sort of* 'service' is associated with their GP and how this is different to the *sort of* 'service' that is associated with their local Accident & Emergency Department, etc.

Adjectival and image sorting

Using this technique we can establish *what sorts of* words and images are associated with a particular brand or company. Each adjective or image is used as a way of *distinguishing* one brand from another – we are essentially asking the respondent to make a distinction on a given dimension. Sometimes, of course, the consumer finds this difficult to do – one word or image can go with more than one brand. This is not a failure of the technique because the next question should be 'and *what sort of* "male", "female", "premium", etc., is brand x or y?' The multiple ascribing of an adjective is no more than a sign that it is a 'fat word' that should be broken down into more meanings. Thus any apparent respondent inability to make initial distinctions are not a problem – they are an opportunity for further learning and to 'split' a word.

Personification

This technique is usually understood in terms that are embedded in modern psychology – we want to get at the 'deeper meanings', 'personality' and 'underlying' associations with a brand. But if we step back from this way of construing personification we can now see it in a new context. When we ask respondents *what sort of* car a particular lager brand is, we are essentially giving them a specific dimension (cars) and asking them to place the brand on this dimension. We are asking them, again, to make distinctions. What sort of car is Stella Artois and, indeed, what sort of car is it not?

We are now in a position to fill the 'gap' that we had in Figure 2. We can see that it is actually full of methodologies that have lacked a theoretical basis before. They have been used for decades in qualitative research because they have worked. They have been conventionally understood in strictly psychological terms, but we can now see how they are rooted in a qualitative account of perception.

Closing the circle: the synergies of methodology and subject matter

When, earlier, we considered quantitative research, we saw that it has a vision of how the world is constructed on the basis of incidence. Importantly, however, we also identified that this model of reality is also paralleled by the methodological approach that it adopts to analyse quantitative data. There is a clear synergy here that both makes the subject matter researched appear comprehensible and the methodologies used to understand it feel legitimate.

When we consider qualitative research, this synergy of worldview and methodological approach has not, hitherto, been apparent. But we are now in a much better position to outline what an equivalent conceptual framework for qualitative research might look like. It is a model of a relational world that can be understood only in relational terms because our perceptions are relationally founded. We understand it by identifying how different consumers frame the world and make distinctions through their 'perceptual judgments'. Every distinction that a consumer makes is, of course, relational because it includes certain things and excludes others (Barnham 2009). Underpinning this methodological approach is the concept of 'qualis' and the classificatory qualitative mind-set that it entails.

The ways in which the consumer frames reality are not fixed or 'objective' in any sense. Consumers will always make further distinctions as they encounter new phenomena and they have to decide 'what sort of thing' these new phenomena are. This is a two-way process – new

experiences are constantly being classified and new types of classification are always being created. But what we have here is an approach that enables a way of thinking about the world to parallel the methodological techniques that are used to research it. This is the bridge between theory and practice that is often missing in the philosophy of qualitative research.

Conclusion

The purpose of this paper has been to explore the possibility of putting qualitative research on a new theoretical footing. It has tried to do so by identifying the very platform upon which quantitative research diverges (and did so historically) from a qualitative mind-set. In so doing, it has been argued that the most effective way to differentiate the two methodologies is at the level of our underlying theories of perception and that the two resulting paradigms take diametrically opposing views as to what these involve. We have also seen that the point of divergence coincides with the underpinnings of Peircean semiotics – but this is a discussion that falls outside the scope of the current paper.

Conventionally, qualitative research has sought to find its *modus operandi* in the tradition of psychology. This has always involved an implicit attempt to evaluate *what* consumers think, but at a deeper level than quantitative research – at the level of what they 'really think'. Such an attempt has always involved an intrinsic need to give a descriptive and *representational* account of psychological or behavioural reality that is open to criticisms of validity and reliability.

The model that has been put forward in this paper is less concerned with *what* consumers think, and more with the question of *how* they think. As we have seen, this, in turn, resolves into an enquiry into how consumers make distinctions and how different consumers make different distinctions. This is the process through which consumers create meaning. This shift in research focus means we are no longer looking for an account that 'corresponds' in some way to a psychological 'reality' in the minds of respondents. Rather, we are looking for the 'rules' and 'structures' of consumer thinking based on their 'perceptual judgments'.

By taking our analysis back to the level of perception we have, additionally, uncovered some of the implicit (and seldom discussed) theoretical underpinnings of *quantitative* research. We have shown that quantitative research is founded on the belief that we experience the world as a series of fragmented perceptions. This assumption has provided, in the last three centuries, the necessary theoretical platform for our statistically

inclined account of what is 'real'. In the course of this paper we have seen, however, that this 'quantitative' account of perception might not be the most appropriate model for understanding social phenomena that are always relational in nature.

We have also recognised that, by tracing our analysis back to the level of perception, we can also identify, within each paradigm, parallel accounts of how the world should be *analysed*. These accounts are rooted in their respective views of how the world is constructed and these, in turn, inform the methodological approaches that they promote. In the quantitative model the world is constructed on the basis of 'incidence'; in the qualitative model on the basis of 'distinction'. This point of differentiation is potentially important to qualitative research because it no longer means that it is asked to justify its methodologies within a theoretical framework that is inherently inimical towards it.

The model that has been discussed in this paper also has, as a final point, one further benefit for qualitative research. This is to establish a stronger theoretical link between qualitative methodology and qualitative analysis. In most academic accounts of the latter there is felt to be an inherent 'gap' between data collection (i.e. the outputs of the interviewing process) and the interpretative task. A 'leap' is felt to be required that takes the researcher from the raw qualitative 'data' to meaningful interpretation. We can now see that such a leap is no longer implicit in the analysis process. Within qualitative methodology we are asking respondents to reveal the distinctions they make. Analysis should, in turn, be construed as no more than a continuation of the process of defining and redefining *how* consumers make these distinctions. This enquiry always begins in the interview process. It simply continues in the analysis stage in the absence of the respondent.

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