GETTING ANIMATED ABOUT EMOTION

THE NEW FRONTIER

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LOOKING FOR EMOTIONAL ENGAGEMENT

The story so far

We've been getting quite animated about emotional engagement for some years now, but we still cannot agree on how to measure it. What almost everyone does agree on, however, is that conventional quantitative research methods – with their emphasis on conscious, cognitive and rational response – fall short when it comes to measuring emotion.

Gerald Zaltman (2003) suggests that marketing researchers put so much emphasis on the cognitive and rational because it is easier to think about the consumer that way and to frame questions that way. Perhaps, but it may also be because the inception of survey research (as we know it today) coincided with the rise of mid–20th century *cognitive science* and predated the neuroscientific revolution at the end of the century.

Cognitive Science was mainly concerned with the mind's conscious mental processes – rather than with the unconscious or the emotional – and was the dominant paradigm until, in the late 20th century, the work of neuroscientists like Antonio Damasio and Joseph Le Doux challenged its assumptions about how the mind works. Neuroscience starts from the premise that we cannot understand the mind without first understanding underlying brain structures and processes. In other words, thinking and feeling are not separate from the brain, but neurally embodied in it.

Like it or not, our feelings, our reasoning, our conscious and unconscious thoughts are framed by our emotions and bodily responses. It is therefore not enough to ask people how they *consciously* feel about something, because emotion occurs *below* the level of conscious cognitive response. We can say how we feel, but we find it very difficult to say *why* we came to feel that way because the processes by which our thoughts and feelings are created are mainly invisible to us.

The limitations of verbal response

Most conventional methods of measuring "how consumers feel" are still based on expressed/verbal response. Typically researchers ask people how they feel and then ask them to explain why they feel that way. Moreover, the measures which conventional research uses to measure emotion are language-based and literal – the problem being that respondents need to consider their response before answering. Yet experience tells us that the more we think and consider our response the *further* we get from our emotions, because we start to post rationalise. Hence verbal questioning (both quantitative and qualitative) struggles to measure emotion, because it seems to mainly engage our *cognitive brain* – the one that (consciously) analyses, reflects, calculates and makes decisions – rather than our *emotional brain,* that reacts spontaneously, immediately and intuitively.

The limitations of verbal questioning in measuring emotions has been further brought into focus by recent important work into how advertising works. Binet and Field (2007) assessed 880 (UK) case studies from the IPA's rigorous effectiveness awards scheme, concluding that "communications models that use emotional appeal are more likely to yield strong business results than rationally based models (information and persuasion)". They also went on to draw the startling conclusion that current conventional advertising pre-testing may even *reduce* effectiveness; advertising that had favourable pre-testing did significantly worse (in terms of business

performance) than that which did not. The authors conclude "the data are clearly not suggesting that pre-testing is entirely worthless, but do cast considerable doubt on the ability of such research to reliably pick winners".

Unsurprisingly, some have lost faith with conventional research altogether and opted for techniques (such as brain imaging) that identify which parts of the brain are active when we feel emotion. There was much excitement, for example, a few years ago when a completely new kind of market research study hit the headlines – at the Baylor Institute in Houston, neuro-scientists used fMRI to monitor brain response during a test of taste and brand preferences for Pepsi vs. Coke.

The neuroscientists (McClure et al, 2004) discovered that in a blind product test (where preference for Pepsi vs. Coke was balanced) only those parts of the brain relating to sensory judgement were active. When respondents were *told* what they were drinking, however, preference switched in Coke's favour, and a part of the brain (the Hippocampus) associated with emotional response, also became active. Brain imaging showed that knowledge of Coke branding activated areas of the brain associated with emotional judgement, whilst knowledge of Pepsi had no corresponding effect. The study's authors concluded: "Our finding suggests that the hippocampus may participate in recalling cultural information that biases preference judgements."

Excited journalists were soon hailing the birth of "neuro-marketing" and writing articles with titles such as "In Search of the Buy Button" or even "Pushing the Buy Button". A new era seemed to be dawning, in which conventional research would give way to techniques based on brain imaging and physiological response.

So, what has happened, four years on from the birth of neuromarketing? There have been some advances and some worthwhile studies – particularly in the area of media engagement – and we should also note the re-emergence of *bio-metrics* alongside neuromarketing. Based on measures of skin conductance, heart rate and respiration, bio-measurement actually dates from

the early 20th century, but modern neuroscientific under-standing combined with advances in technology have made its application to modern market research possible.

But can these techniques tell us something that conven-tional research cannot? Actually, when it comes to emotion, neurological/biological measurement can generally tell us *what,* but not *why.* Mast and Zaltman (2006) nail the problem perfectly with their observation that "emotion without cognitive appraisal is really just arousal". In other words, simply *observing* a neurological or biological response is not the same as *understanding* an emotion – because one is about physiology, the other about cognitive appraisal. Indeed, most of the proponents of neurological/biological approaches admit that their techniques are *not* alternatives, but complements to conventional research, either quantitative or qualitative. Why? Because they have no way of understanding what a respondent is feeling at the time of observation other than by asking a conventional question. All of this is somewhat ironic (and circular) when we consider that neuromarketing and bio-metrics developed *because* conventional research was not up to the task of measuring emotion.

How do we go forward?
Neuromarketing is, essentially, about using brain imaging techniques to locate activity in the brain and then correlating that observation with mental response – to a brand, product or piece of advertising. The problem is that the interactions within the brain are so fast and complex that it is not that easy to say that *because* a particular part of the brain 'lights up' we are feeling a particular emotion or thinking a particular thought. In neuroscience there is a distinction between the cognitive brain (the frontal cortex), which (consciously) analyses, reflects, calculates and makes decisions, and the emotional brain (the Limbic system), which reacts spontaneously and intuitively. There is, however *constant two-way traffic* between the two – any information processed by the cognitive brain is sent back to the Limbic system to be evaluated emotionally; the reaction then goes back to the frontal cortex, where it is interpreted as feeling.

If our two 'brains' do not work in isolation and there is constant communication between them, then surely the most fascinating challenge for marketers must be at the *frontier* between the two, where pre-conscious impulses emerge, blinking into the light of consciousness, as verbalised thoughts and feelings. Surely we need to look for the *links* between the cognitive and emotional brains – particularly those *pre-cognitive* processes that underpin our conscious thoughts and utterances – allowing us to make sense of things even before we even give them conscious consideration.

By shifting the focus of survey research towards the pre-cognitive (and away from cognitive or physiological responses), we can start to focus on the mental shortcuts that allow us to construe meaning without having to think too deeply. It is highly likely that these can provide the basis for an *entirely new* way of measuring emotion – one that relies neither on cognitive response nor on (complementary) physiological measures.
A simple example may be our instantaneous reaction to certain facial expressions: for example, when we see someone frown or smile, our brains interpret meaning intuitively, without the need for considered thought.

One of the most promising means of understanding pre-cognitive response is the *cognitive linguistic theory of metaphor.*

According to this theory, metaphors can create emotional meaning instantly and intuitively because they are actually neural connections which create meaning automatically in our unconscious mind, well below the conscious linguistic surface. They arise because we often (habitually) experience a particular feeling at *the same time* as a bodily sensation or experience, thus attaching a *metaphorical* meaning to that experience. The emotion becomes *conflated with* the physical experience, which becomes its metaphor, as in *intimacy is closeness.*

As Zaltman (2008) comments: *"In many ways, deep metaphors and emotions are siblings. Both are hardwired in our brains ... people experience them at some basic level worldwide."* He argues that *"... because metaphors and emotions work hand in hand ... it may be impossible to understand the latter without the former."* That is certainly also the view of Zoltán Kövescses (2000), who says:

"Emotion language is largely metaphorical in English and in all probability in other languages as well ... to capture the variety of diverse and intangible emotional experiences. Methodologically, then, this (metaphorical) language is not only a reflection of the experiences, but also creates them. Simply put, we say what we feel and we feel what we say."

The power of emotions in driving our behaviour is, according to Kövesces, made plain in his "master metaphor" for emotion – *emotions are forces* – illustrated by the some of the following sentences:

- He was *seized* by emotion
- She was *overcome* by emotion
- His emotions *ran away* with him

Damasio (1999) observes: "We are about as effective at stopping an emotion as stopping a sneeze". Indeed, the use we make linguistically of the emotions are forces metaphor suggests that this is something we know and express intuitively. Each of the above sentences convey the idea of emotion as an almost irresistible physical force.

FINDING A SOLUTION

Going from the literal to metaphorical
It is deeply ironic that market researchers inhabit a world of brands and concepts, yet, in measuring it, so easily default to the prosaic and literal. After all, most brands and advertising are metaphorical in some way, yet even today, in 2008, most market research studies are text-based and literal, not visual or metaphorical. The problem with textual questions is that they usually require cognitive processing, and respondents need to consider their response before answering. The more we think and consider our response, the *further* we get from our emotions: the emotion may still be present, but it becomes blended with our thinking and more prone to rationalisation.

Clearly, we need to look for approaches that encourage an intuitive and spontaneous, rather than a thought-

through response. Cognitive linguistics suggests that metaphors have the power to express emotion more vividly than literal language because they can evoke an emotional response directly, *without* the need for conscious, rational consideration. Furthermore, because many metaphors are cross-cultural in their application, they provide the basis for a universally relevant measurement tool.

Using metaphors to express emotion

Metaphors seem fundamental to being human; even the way we think about ourselves is fundamentally metaphorical. For example, we talk of struggling to gain control over ourselves, of our higher self battling with our lower self, trying to find one's true self. When people talk about having "relationships" with a brand, or a brand being like an "old friend" they are using a metaphoric mode of speech to convey their feelings (emotions) about it.

Take a close look at the following everyday sentences:

- I have a very *warm* relationship with her.
- I feel *close* to him.
- I *jumped* for joy.
- He's a very *distant* sort of person.
- I'm feeling *down* today.
- He's a very *cold* person.
- Things are looking *up*.

In each sentence, emotion is expressed by means of a metaphor: warmth for affection, closeness for intimacy, jumping (off the ground) for excitement and so on. Perhaps the reason that we use metaphors so frequently to describe how we feel is that it is very difficult to describe these emotions *without* using a metaphor.

Most importantly, we seem to grasp the meaning of metaphors intuitively. For example, when someone is described as "distant", our brain 'knows' (unconsciously) that we are not talking about geographic proximity. Yet how does it know this? Because literal communication mostly involves the cognitive brain – which consciously processes information – whereas metaphorical communication seems to speak to the unconscious parts of the brain, evoking images and creating meaning

without our being aware of what is happening. Thus metaphors may *appear* to consist of words that *appear* on the linguistic surface, but, *underneath* this surface, their meaning is so immediate and powerful that there is no need to compute or deduce it.

Singerland (2005) uses the example of "digging one's own financial grave" to illustrate the importance of metaphor in evoking emotional reaction. It is a well understood metaphor meaning that bad financial decisions cause financial failure, but why import the metaphor of grave digging at all? It does not seem to add anything in terms of helping us to understand the literal point; rather, its purpose is to evoke (negative) emotion, to inspire (or help us imagine) the negative emotional reactions associated with death, corpses and so on. In other words, the metaphor adds *emotive power* to the literal meaning.

Which metaphors are important to emotion?

The reason that metaphors are so powerful, according to leading cognitive linguistics experts such as Lakoff and Johnson and Kövesces, is that they are actually neural connections, which create (automatic) meaning below the conscious linguistic surface. The key idea here is that metaphorical thought is based on bodily experience and correlated neural activity in the brain. This leads to the hypothesis that metaphorical meaning may become *attached* to certain sensory experiences if we habitually experience a particular feeling or emotion at *the same time* as that experience.

The idea that metaphorical meaning is grounded in our physical experience has led cognitive linguistics experts to suggest that the metaphors which arise from this process are *universal* in their application. Why? If metaphor is based on the way the body and brain function and human beings are alike at the level of this functioning, then most of the metaphors that people use must be fairly similar, if not universal. There is indeed a great deal of evidence to suggest this, particularly for the so-called *primary metaphors,* which seem to be part of our unconscious mind, acquired automatically and unconsciously, in our formative years, through the conflation of subjective and sensory experiences.

The Theory of Primary Metaphor derives from fundamental insights by Christopher Johnson (1997) and Srini Narayanan (1997), later developed into an integrated theory by George Lakoff and Mark Johnson (1999).

It was Christopher Johnson (1997) who first argued that primary metaphors are learned (in young children) through the conflation of subjective and sensory experiences. Thus, it is argued, affection is typically correlated with the physical experience of warmth, because most young children experience warmth when being held affectionately in their mother's arms. Objectively, warmth is not even similar to affection, yet the two become conflated, and amongst very young children, the experience is *undifferentiated,* so that the feeling and the sensory experience are felt to be the same. As they develop, children start to separate them, although the primary metaphors persist, leading the infant, in later life, to speak of "a cold response" or "a warm relationship". Narayanan's theory explains that the connections made during conflation are 'hardwired' (instantiated) into our neural circuitry – producing a stable, conventional system of primary metaphors that tend to remain in place indefinitely and are independent of language.

Visualising metaphors – going beyond language

We usually think of a metaphor as a set of words, but, as we have seen, they actually exist *beneath* the linguistic surface. Metaphors are essentially concepts, which represent one image or idea in terms of another, and therefore do not have to be expressed linguistically. Humans understood emotions, such as fear and affection, long before they had the capacity to describe them linguistically, and so are able to represent them through visual metaphors. We can do this because so much of our thought is based on images (not words). Indeed, most stimuli actually reach the brain through the visual system, and so we constantly translate verbal information into visual imagery. Hence if we read or hear a word, what we generally see (in our mind) is a visual *representation* of the word, not the word itself.

Metaphors lend themselves to visual expression *because* they are inherently conceptual: they are about representing one thing *in terms* of another. If the visual metaphor is instantly recognised, it will create meaning automatically, without the need for conscious reflection. Visual metaphors thus provide a powerful route into emotion, avoiding the need for thinking or rationalisation on the part of the respondent.

The visual nature of (emotional) metaphor lends itself strongly to *online* research applications, and it is curious that the first generation of online research more or less ignored this. Early online researchers mainly took conventional, text-heavy questionnaires and put them online. This is particularly odd given the obvious opportunities offered by online technology to *visualise and animate* questionnaire formats. As Lanham (2007) says: "The printed page depends on the economics of deprival. No color, no movement, images in careful moderation... the digital screen is *the economics of plenty* (my italics). It allows competition between word, image and sound for our attention."

It is disappointing how, even today, so few online questionnaires fully exploit the opportunities of the digital screen, or use its great potential for visual rather than textual presentation of questionnaires. Yet digital technology and Web 2.0 have given us the opportunity to ask questions in novel and interactive ways that really engage respondents. Perhaps the problem is that researchers still regard online as a means of *data collection,* whereas they should look on it as a *medium.*

DEVELOPMENT OF THE METAPHORIX™ APPROACH

Assembling the building blocks

It seems that researchers have been debating and discussing the importance of measuring emotion for some years now, yet there has been relatively little concrete progress in terms of either new measures or metrics. The remainder of the paper is about how to turn theory into practice, and describes how Conquest Research developed and validated a new system for measuring emotional response, called Metaphorix™.

The foregoing discussion of emotion, metaphors and Web 2.0 has highlighted a number of problems and deficiencies in conventional approaches to measuring emotion. These are summarised in table 1, and alongside each problem is a proposed solution.

The Metaphorix™ project puts these ideas and hypotheses into practice. It is about using animated visualisations of metaphor to plug directly into consumers' immediate emotional response (to brands, advertising and other marketing stimuli), thus avoiding the over rationalisation inherent in traditional approaches. All Metaphorix™ measures are thus interactive online animations that respondents can use intuitively – without having to think or consider their response.

Development work on current animations commenced in 2007, and comprised a series of depth interviews and online observation sessions in which respondents were introduced, online, to a range of ideas and executions for visualised metaphors. A number of requirements and guidelines emerged from this phase that inspired and informed the development of the overall project.

1. The metaphors must be intuitively understood
Cognitive linguistic theory would suggest that if we are to use metaphors for measuring emotions, they should be intuitively understandable. If the metaphor needs to be 'processed' (i.e. thought about) it defeats the object of encouraging a spontaneous and, above all, non-thought through response. Unsurprisingly, it emerged from development work that visualisations based on *primary metaphors* proved most effective in this respect.

Thus, in developing Metaphorix™, considerable emphasis was given to selecting metaphors that are both intuitive and have potentially universal application. Clearly those (primary) metaphors linked with subjective emotional states – such as love, affection and intimacy – have greatest relevance to the measurement of emotion. In each case a particular (sensory) experience correlates with the emotional judgement to create the metaphor. (See figure 1.)

Thus if we consider the construction of the primary metaphors illustrated in figure 1, it can be seen that each represents an emotional state, in terms of a specific sensory experience. For example, affection is represented in terms of warmth, intimacy in terms of physical proximity, happiness/sadness in terms of up/down and so on. Each one finds also expression in familiar linguistic expressions, for example:

- *"I feel really cold towards him..."*
- *" I have a very close relationship with her ..."*
- *" I feel very down today..."*

TABLE 1

Problem	Hypothesised Solution
When we think and consider we get further away from our emotions	Encourage intuitive, spontaneous and non–thought through response
When we talk about emotion we use metaphorical rather than literal language	Allow respondents to express their emotions via metaphor
We think mostly in images not words, but conventional MR is text based	Use measures that are visual and non-verbal, rather than text based
Conventional online research doesn't engage with respondents as well as it should (hence compromising data quality)	Use a seamless visual interface and level of interactivity that engages the Web.2.0 generation.
Use of language-based verbal scales (and in particular use of top boxes) differs across cultural boundaries, making cross-cultural brand evaluation difficult	Visual animations based on primary metaphors transcend language barriers and aid our interpretation

FIGURE 1
SOME PRIMARY METAPHORS
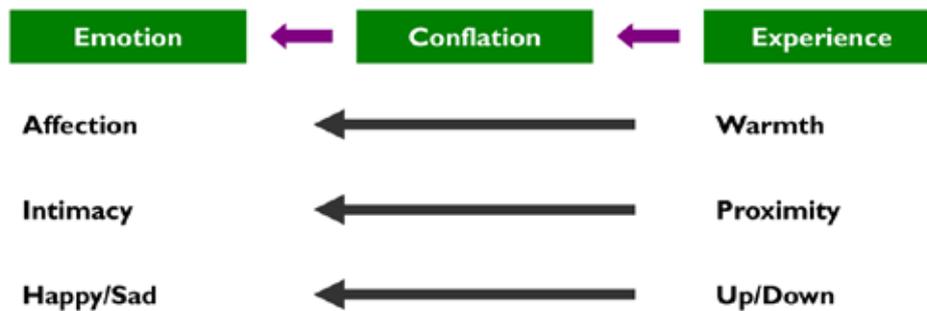
2. The visual interface must fit seamlessly with the medium

In the course of the development work, it became clear that respondents engaged most rapidly and intuitively with well-executed and well-finished graphics. Having a high quality respondent interface is not therefore merely a question of aesthetics, but a crucial means of gaining and maintaining respondent engagement with the interview process. Furthermore it has a *functional* benefit, because the quality of the online interface is crucial to how easily respondents actually *use* it. Online users are now accustomed to an extremely high quality of interface and react negatively towards poorly executed visual graphics, dismissing them as 'badly drawn cartoons' or 'amateurish'. Poor graphics and 'clunky' interactivity actually get in the way, because they encourage respondents to evaluate the *medium* rather than the *message,* and defeat the object of what we are trying to achieve – an instantaneous and intuitive response.

We need to recognise that, from a consumer perspective, online is not a 'means of data collection' but a *medium.* What we present *via* that medium needs to be consistent with the other experiences that the respondent may have with, for example, Facebook, You Tube or with any number of other high quality sites that they may visit in a Web 2.0 environment. Just as poorly executed TV commercials stand out (for all the wrong reasons), poorly executed online studies impair the quality of interaction/response – taking people further away from their emotions and into unhelpful (cognitive) judgement *of the medium itself.*

For these reasons, considerable investment was put in to creating high quality animations for Metaphorix™, that deliver an online experience equal to the best that can be found in the Web 2.0 environment. A creative company in London's Soho was commissioned to produce the designs and a specialist animation house appointed to execute them.

3. Interactivity turns respondents into participants

Metaphorix™ is, essentially, a Web 2.0 product and the essence of Web 2.0 is user interactivity. It is about *opening up access and allowing users to co-create.* Tim O'Reilly (who invented the term), describes it as "going beyond the page metaphor of Web 1.0 to deliver rich user experiences." User engagement and involvement are, therefore, not *benefits* of Web 2.0, they are the very essence of it.

One of the guiding principles of the Metaphorix™ approach is that respondents should be enabled to interact and co-create. It became evident that most respondents share this aspiration, but many want more than this – they actually want to *enter* the process by projecting themselves *into* it. Encouragingly, this desire is entirely consistent with some of the Metaphorix™ measures that ask the respondent to express his feelings towards a brand through movement/ spatial relationship.

For example, the visualisation of *intimacy is proximity* invites a respondent to demonstrate how close they feel to a brand by moving themselves towards or away from it.

4. The importance of avatars

Whilst relatively few people actually visit *Second Life* there is quite widespread familiarity with the idea behind it: that a participant can represent himself by means of an *avatar* and project himself *into* a scenario. Early testing of Metaphorix™ indicated that this was a highly engaging and effective idea, which has particular relevance to and significance for the measurement of emotion. After all, qualitative research practitioners have, for some decades now, been using projective techniques to help penetrate the unconscious mind by eliciting feelings below the surface of conscious, rational response.

Thus, in the first stage of the Metaphorix™ interview, respondents are asked to choose an *avatar* to represent

themselves within each animation. The choice of avatars has been specifically designed to represent gender and racial diversity so that respondents can choose a representation of themselves with which they feel both empathetic and comfortable. The avatars validated for use in Metaphorix™ are illustrated in figure 2.

International testing indicates that these avatars are widely applicable across different markets, including China. Table 2 demonstrates that respondents – interviewed across four countries and three continents – were comfortably able to pick an avatar from the set of choices.

METAPHORIX™ IN ACTION

How to bring visual metaphors to life
Metaphorix™ currently comprises a range of five metaphoric visualisations, all of which are presented as interactive online animations that respondents can use intuitively, without having to think or consider their response.

FIGURE 2
THE METAPHORIX™ AVATARS

During this questionnaire, you will be using a character to represent you for certain questions.
Please pick the character from those below who you want to represent you for this questionnaire.
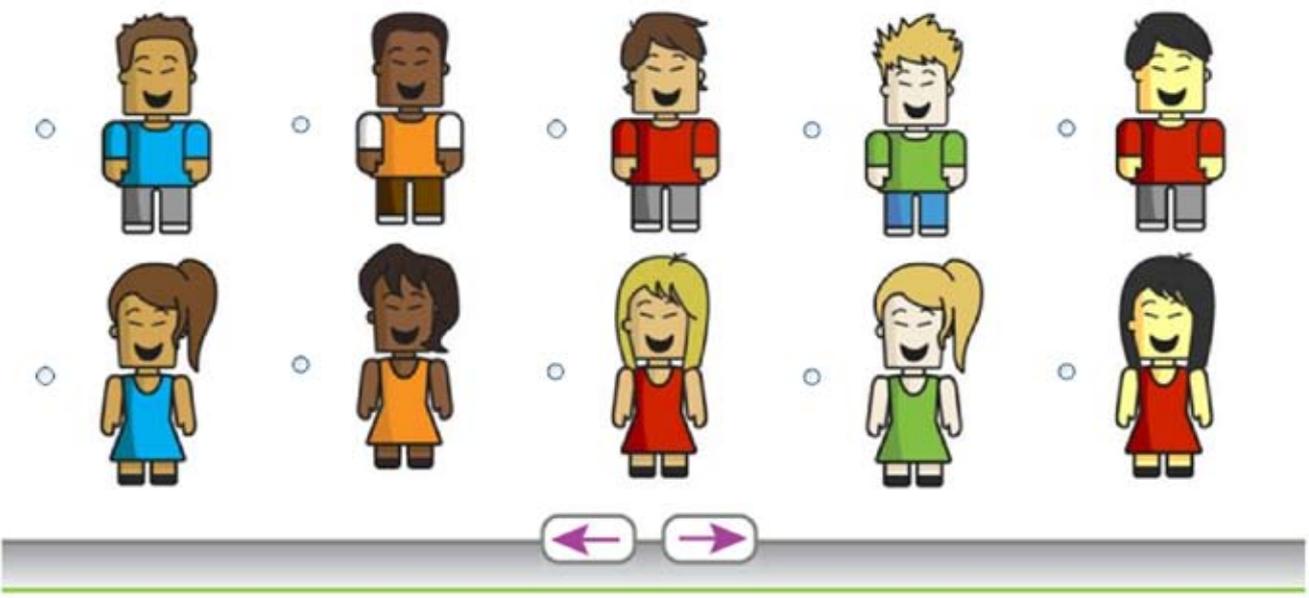
TABLE 2
THE AVATARS WORK INTERNATIONALLY

Q12. And which of these phrases best describes how you found picking a character to represent you in the survey?

Base: All respondents		Language					Gender	
	Total	UK	US	Italy	China		Male	Female
Unweighted Base	1228	306	306	308	307		612	616
Weighted Base	1228	306	306	308	307		614	614
	%	%	%	%	%		%	%
It was fine - I had no problems choosing an avatar that I wanted to represent me	77	74	76	85	71		80	74
It was ok - none of the avatars represented me well, but I could choose one	22	24	23	14	28		19	26
Not good - none of the avatars were suitable to represent me	1	1	1	1	*		1	*

FIGURE 3
THE PROXIMITY METAPHOR IN ACTION
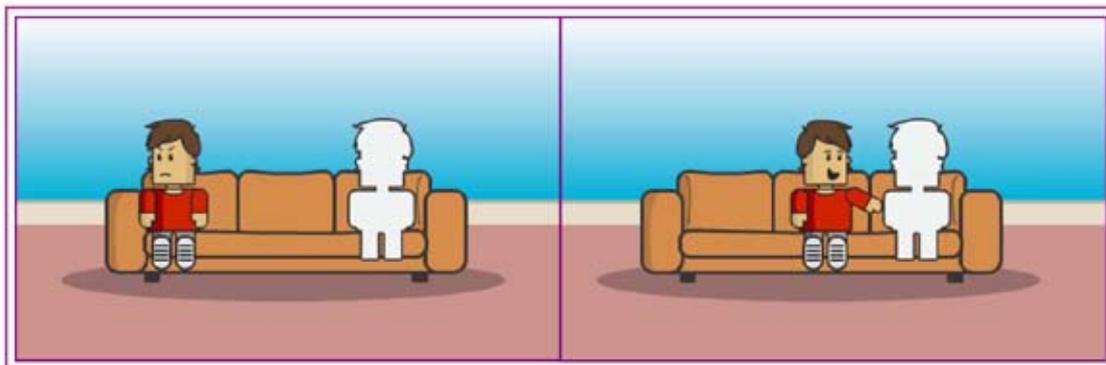
Within each animation, respondents can move their self-representing avatar to show how they feel about a brand, a piece of advertising, or any other marketing stimulus.

Each animated visual scenario represents a metaphor associated with an emotion: for example, proximity/closeness as a metaphor for intimacy (see figure 3). The emotion is represented by a visual space in which the respondent places his avatar in relation to another person, an object, or value, such as a brand. The respondent is given a non-leading instruction such as: "move your avatar to show how you feel about Brand X". A key element of the respondent interface is that the animations are free-flowing, allowing the avatar to move seamlessly across the entire animation, without the respondent being aware of any scaling or calibration.

The Metaphorix™ tool uses visualised metaphors (of sensory experience) to represent five emotions/feelings. These are summarised in table 3.

TABLE 3

Emotion	Visual metaphor used
Affection	Temperature
Intimacy	Proximity
Excitement	Being off the ground
Happiness	Facial expression
Empathy	Approaching/Coming towards you

FIGURE 4
PROXIMITY TO BRAND
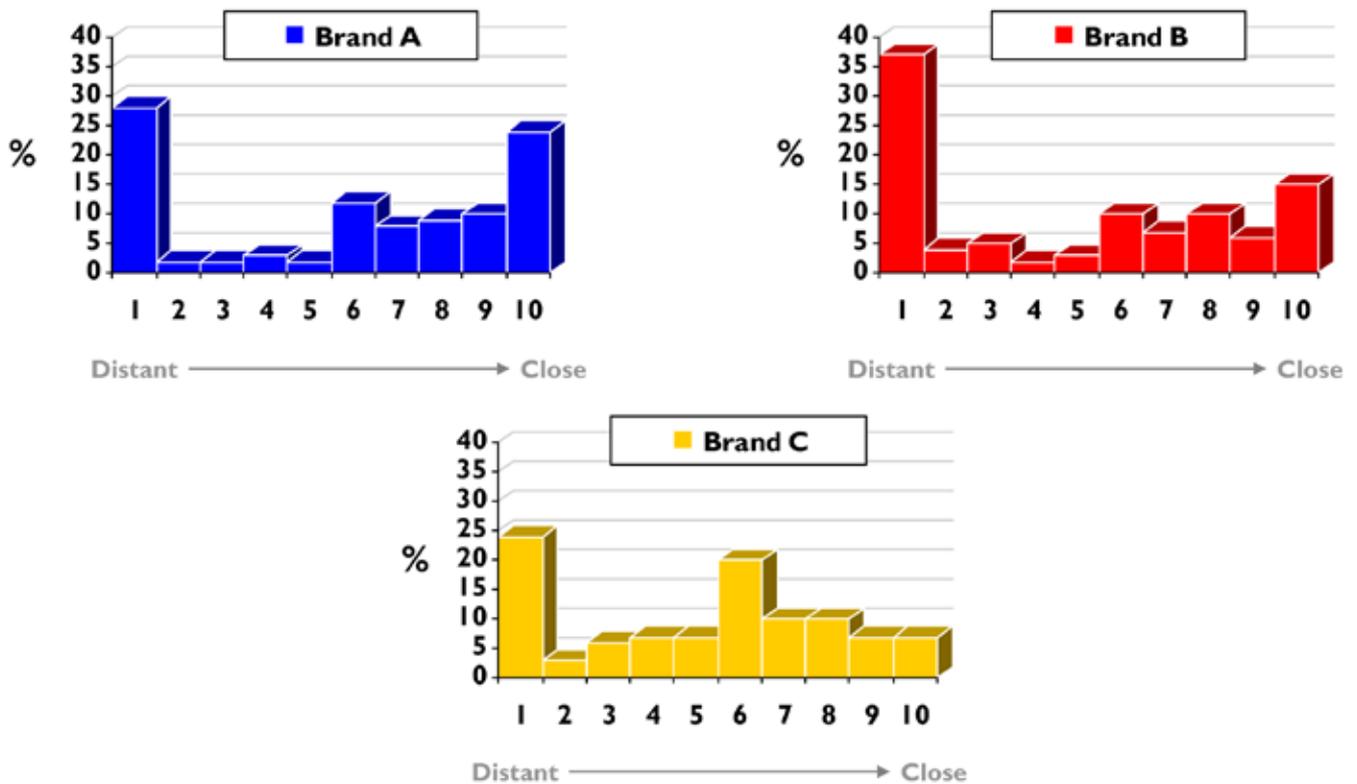
For example, the metaphor *affection is warmth* is represented visually by temperature (from hot to cold), since the sensory experience that underpins the metaphor is warmth. In each case there is no need for the animation to have numbers or words, but behind the visual animation, response can be scaled and calibrated quantitatively.

An example of output for the Proximity metaphor is shown in figure 4, which shows the presentation and calibration of data (using a 10 point scale), for three different brands.

Figure 4 indicates that respondents are quite likely to use the *extremes* of the scale – if they feel strongly about the brand(s) in question – uninhibited by having to give/choose a semantic response. Indeed, one of the key findings to emerge from the validation exercise is that metaphoric measures enable consumers to express themselves more fully, which has the effect of 'pulling apart' responses where standard measures tend to produce a flat-line.

VALIDATION OF METAPHORIX™

The testing programme

Metaphorix™ was launched internationally, in May 2008, after completion of an extensive (iterative/multi-country) validation programme. It comprised over 5,000 interviews, focussed on major international brands, and was designed to test the following hypotheses:

1. That animated visual metaphoric scales better capture consumers' emotional response to brands and advertising than conventional measures.
2. That this approach can be employed *universally* to measure engagement with brands and advertising.
3. That these new metaphorical measures work effectively alongside conventional verbal scales to enhance insight into the contribution of emotion to building brand share.

By exploring response to a wide range of brands and advertising – some emotional, others more rationally based – a balanced test design highlights where conventional research falls short of capturing emotion, and also shows how visual metaphoric measurement can fill the gap left by conventional measures.

The two key phases of the programme were as follows:

Test 1 assessed 18 TV commercials, and comprised 3681 respondents, interviewed online in the United Kingdom during March/April 2008.

The research approach and rationale is illustrated in figure 5. Three matched cells were needed, for each brand and advertisement, to establish the benefit of using visual metaphors over a conventional approach (to measuring emotion). The test design thus allowed robust analysis of:

• The impact of exposure to advertising versus a non-advertised cell (who saw only a brand logo).
• The effect of combining Metaphorix™ measures with verbal scales versus a matched cell, which was exposed to the same stimulus, but given only conventional verbal scales.

FIGURE 5
TEST I: OVERVIEW OF METHODOLOGY
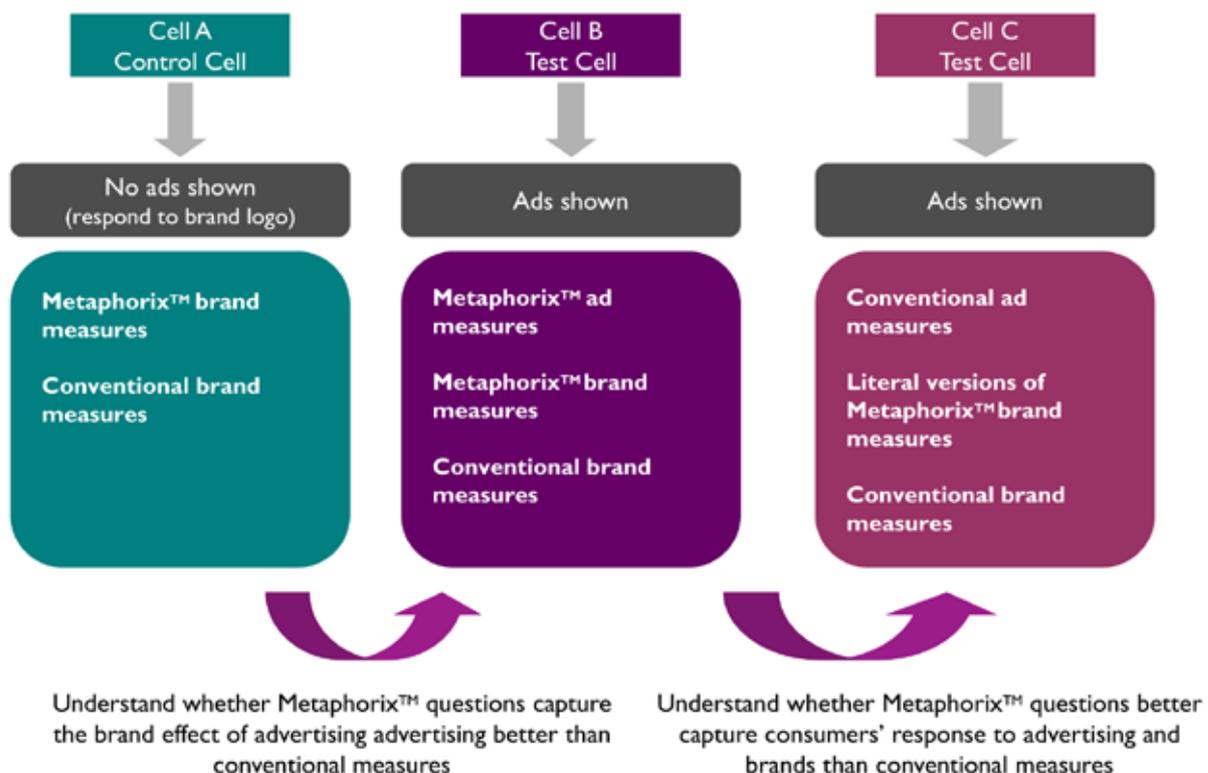
Test II comprised 1,228 respondents interviewed online, during May 2008, in China, USA, Italy and the United Kingdom. It focussed on response to major international brands across four categories within each country, using both conventional and Metaphorix™ measures. Each respondent assessed only one brand from each category with order of exposure rotated using a balanced incomplete block design. The test was designed to explore consumer relationships with pairs of high equity brands – for example, Coke and Pepsi, Nike and Adidas. The methodology is illustrated in figure 6.

WHAT ARE THE BENEFITS OF METAPHORIX™ OVER CONVENTIONAL MEASURES?

The programme of testing revealed a number of benefits of incorporating the Metaphorix™ approach into brand and advertising evaluation. These benefits are described below:

1. Enabling consumers to express themselves fully

The results of the validation programme indicate that visualised animations allow respondents to express their feelings – about brands or advertising – *more freely* than do conventional verbal/semantic scales. In

particular, it appears that respondents are more likely to use the top end of scales and less likely to use the middle responses.

Figure 7 shows the comparison of results (from Test 1) of a Metaphorix™ Brand Warmth scale (10 point) with a comparable verbal scale (where 10 = *I feel extremely warm towards brand* / 1 = *I feel extremely cold towards brand*). Test 1 comprised matched independent samples and, in each cell, respondents were asked to express their feelings towards a brand, after seeing some TV advertising, one cell using a metaphoric Brand Warmth scale and the other the comparable verbal scale. Each cell was matched to the other in terms of demographics and brand usership, and was shown exactly the same advertising stimulus.

The results indicate that respondents are significantly more likely (when evaluating advertising metaphorically) to use the top end of the scale and significantly less likely to use the middle (4 - 7) responses.

This pattern of response is also evident internationally: results from Test II (conducted across four countries) indicate that the same pattern of response is evident

FIGURE 6
TEST II: OVERVIEW OF METHODOLOGY
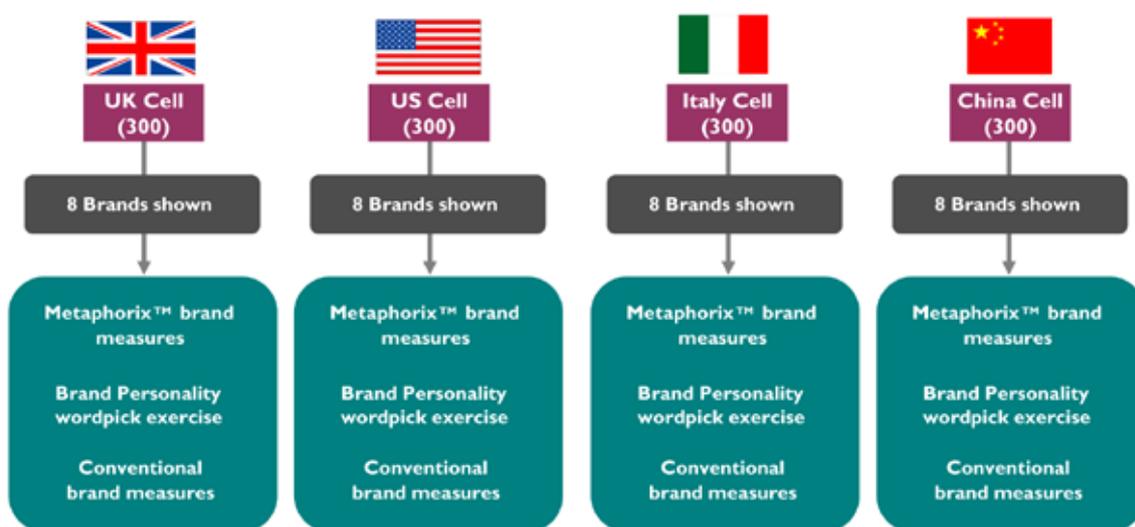
Comparison of 4 market cells allowed us to test whether Metaphorix™ measures work better internationally (across cultures/languages) than conventional measures

FIGURE 7
BRAND WARMTH
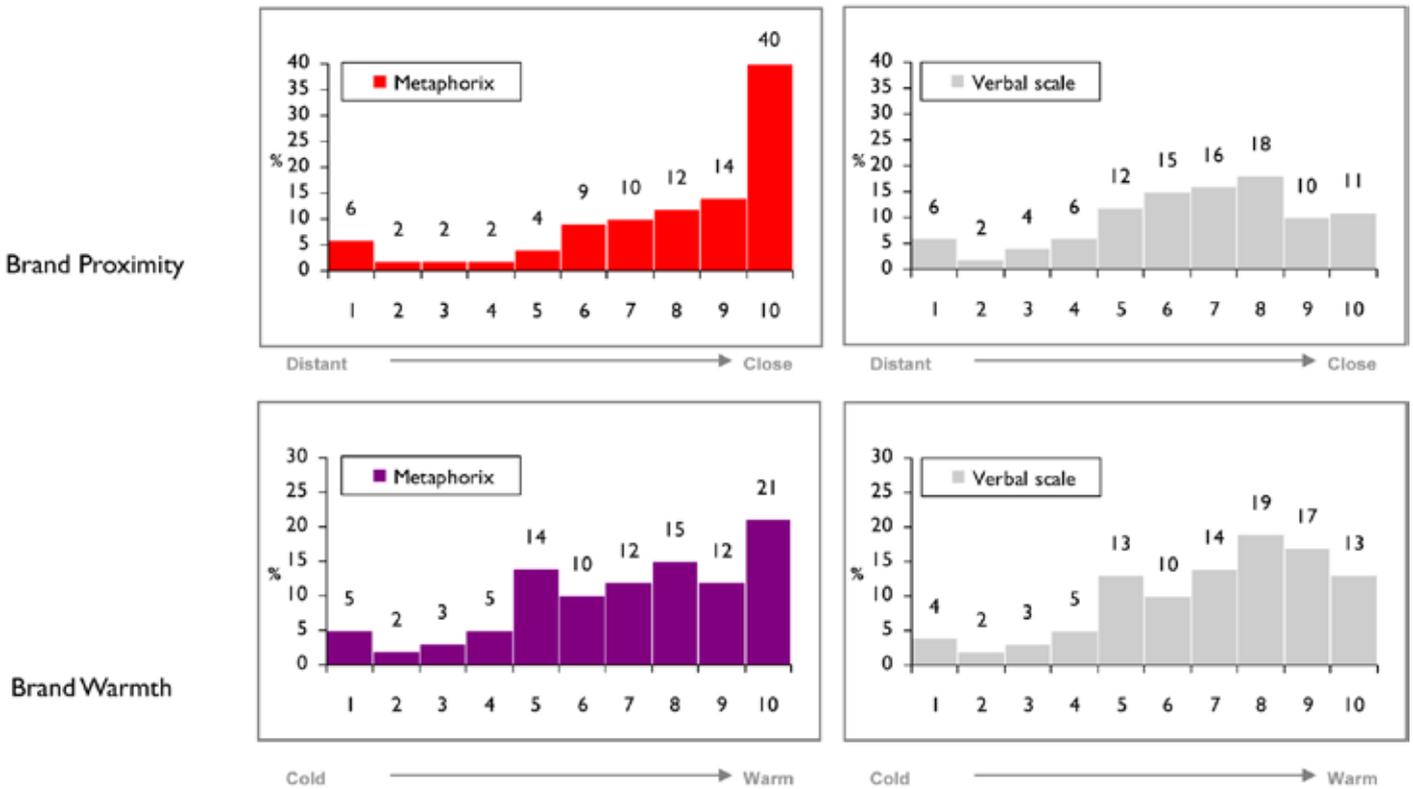**CONVENTIONAL VS. METAPHORIX™ SCALE (UK)**
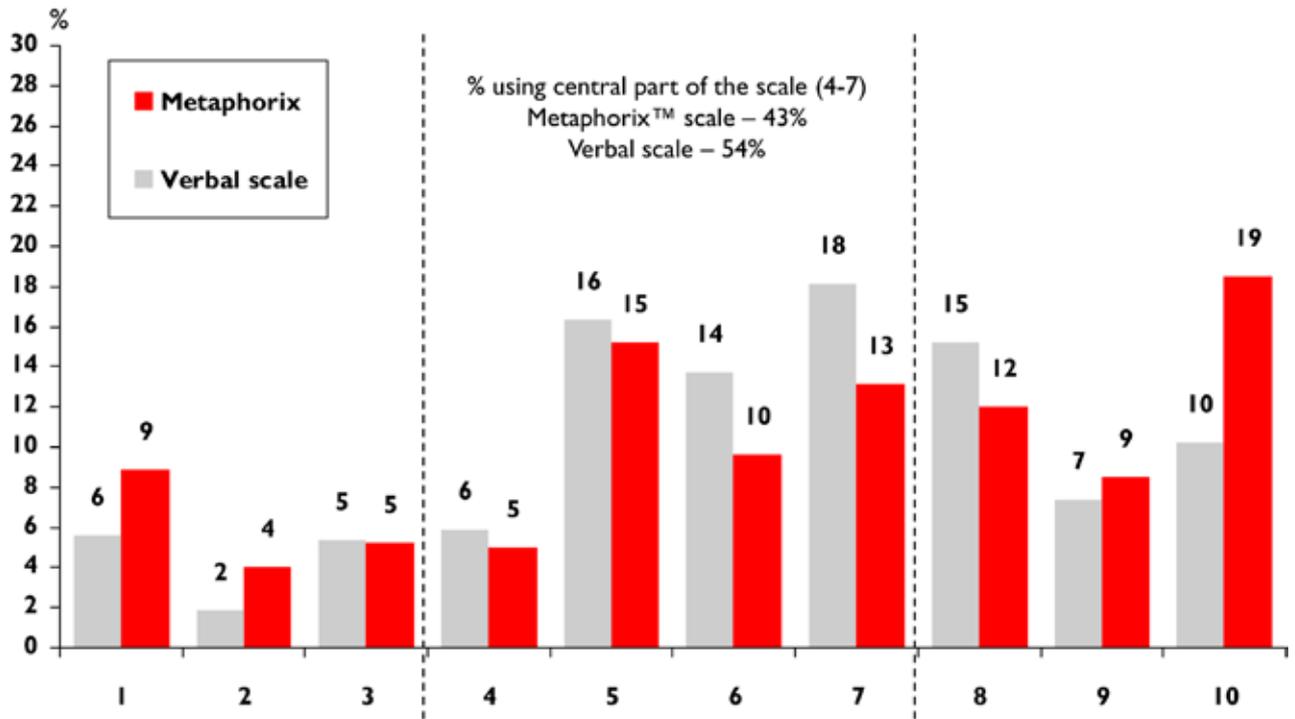
Base: 3681 respondents in UK

for measures of both Empathy and Proximity (see figure 8) when respondents are asked to assess major international brands, such as Subway and McDonald's, Apple and Microsoft.

Why is "freedom of expression" important when measuring emotional reactions to brands or to marketing communication? The results of the IPA study (outlined earlier in this paper) highlighted the difficulty of picking 'winners' using conventional advertising pre-testing, particularly for advertising that speaks mainly to the emotions. Conventional pre-testing typically measures emotional engagement via scalar responses (on dimensions such as likeability, enjoyment or involvement), and this can produce an undifferentiated response, making it difficult to pick out winners. This effect was apparent in the test of 18 TV commercials in the United Kingdom (Test 1) described earlier. Each of the

commercials submitted to this test focussed on non-rational (emotional) communication.

The results are shown in figure 9, which compares response to the 18 commercials using a conventional 5-point enjoyment scale with a Metaphorix™ Happiness measure. Overall levels of response were, on average, higher using the metaphorical measure, but, most importantly, there are a number of cases where response is significantly higher than one might expect. Of most interest is the 'winning' commercial (the award winning 'Gorilla' commercial for Cadbury's Dairy Milk, a major UK confectionery brand) which is significantly ahead of the next best commercial on the metaphorical measure, whereas on the conventional measure it scores at a similar level to three other commercials. Moreover, the percentage gap between this and the bottom commercial is 42 percentage points on the

FIGURE 8
CONVENTIONAL VS. METAPHORIX™ SCALES - INTERNATIONAL COMPARISON

Base: 1227 in UK, USA, China and Italy (approx 300 per country)

conventional measure, and 63 percentage points on the metaphorical scale.

These results support the hypothesis that the visual/ metaphorical approach allows respondents to express themselves in a more unfettered, spontaneous manner, which helps to discriminate between different advertising executions, particularly those – like Cadbury's Gorilla – that appeal directly to the emotions. Response to the commercial for Brand Z is also particularly interesting in this respect. Brand Z is a leading UK beer brand, aimed at young men and using the creative theme of male bonding in its advertising. Again, the intent of the advertising is to appeal to the emotions rather than communicate a rational benefit. Respondents of this age and gender are notoriously difficult to interview about their emotions, and it seems likely that the conventional verbal scales constrained their response in this instance,

whilst the visualised metaphoric scale seemed to encourage a 'freer' and less constrained response. (See figure 9.)

It can be also be seen in figure 9 that, in a number of cases, there was no significant difference between the scores on the metaphoric and conventional scales, indicating that where difference does arise, it is because the metaphorical approach is better able to capture emotional response.

2. More sensitive measure of brand engagement shifts
The 'test and control' methodology of Test I also enables an assessment of the ability of metaphoric measures to detect underlying movements in brand engagement. In the control cells, respondents saw no advertising and were asked to rate the brands (represented by their logos) using both Metaphorix™ measures and

FIGURE 9
ADVERTISING ENGAEMENT: CONVENTIONAL VS. METAPHORIX™ MEASURES
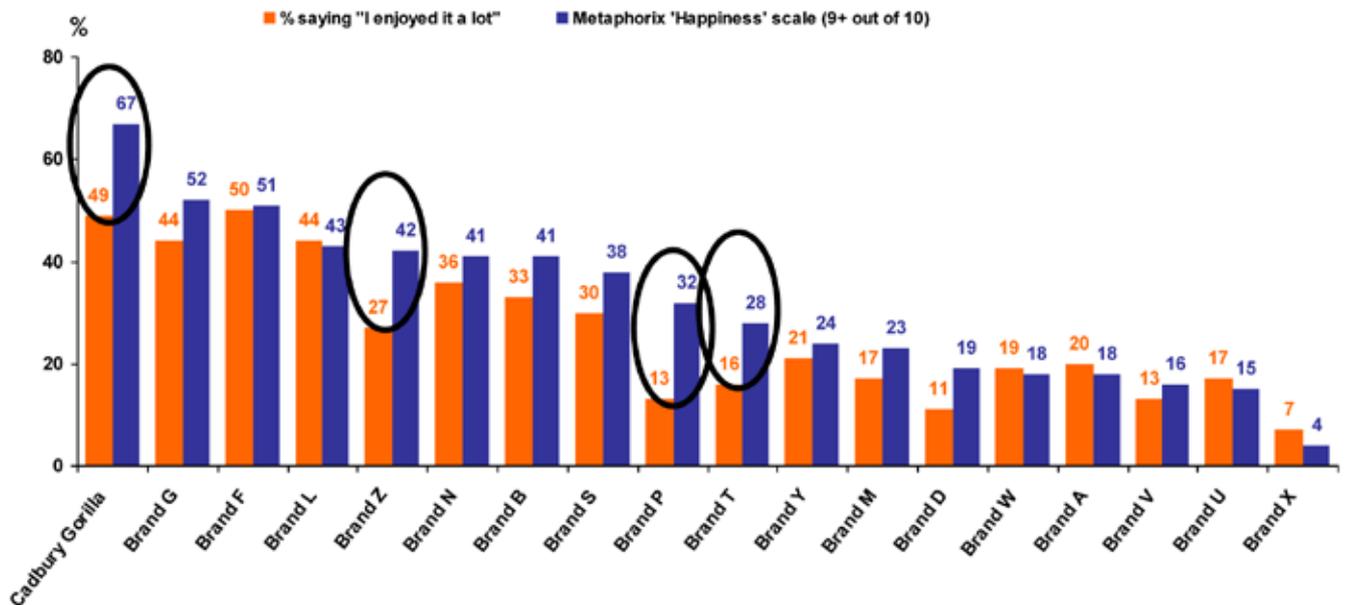
Base: 3681 respondents in UK

conventional brand measures, such as brand disposition and purchase propensity. In the parallel test cells, respondents were shown TV commercials (for the same brands) and asked to rate the brands using the same mixture of metaphorical measures and conventional brand measures. Comparison of movements between the two cells can thus tell us how well each approach identifies brand engagement shifts engendered by exposure to advertising.

The results show (see figure 10) that conventional persuasion measures produced only two significant shifts between the test and control cells – for brands B and M – one moving positively and the other moving negatively. The metaphorical measures were generally more sensitive to movements in brand engagement engendered by exposure to the commercials. Six of the commercials (33% of the total) produced a significant positive shift on at least two of the three Metaphorix™ measures (Empathy, Warmth and Proximity) versus the control cell, with no corresponding movement on the conventional measures.
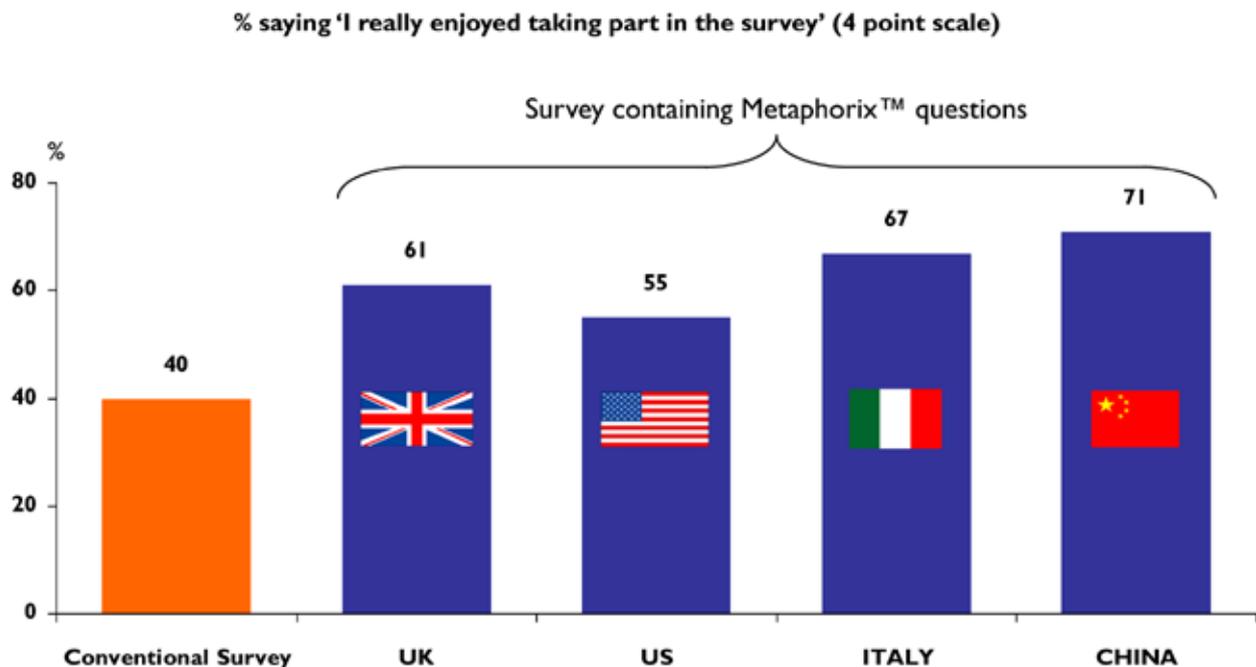
3. Making the interview more engaging

In previous sections, we discussed the importance of engaging respondents with the interview process. Thus, at the end of each interview, respondents were asked to say how much they enjoyed taking part in it, and to give their comments. Comparison of response in cells where Metaphorix™ measures were used versus those where only conventional measures were employed, allows examination of the effect of including such scales on respondent engagement and survey enjoyment. Figure 11 shows that, in the United Kingdom, levels of survey enjoyment were significantly enhanced (over a parallel conventional study), with approximately 60% saying "I really enjoyed it". A similar outcome was evident in the United States, and in both China and Italy, levels reached c. 70%. The levels of survey enjoyment observed across different countries suggests therefore that the Metaphorix™ approach has wide cross-cultural acceptance and applicability.

FIGURE 10
COMPARISON OF BRAND ENGAGEMENT SHIFTS, POST ADVERTISING:
PERSUASION SHIFTS VS. METAPHORICAL SCALES

	Conventional Persuasion Shift	metaphorix Brand Proximity	metaphorix Brand Empathy	metaphorix Brand Warmth
Brand F	no shift	+12%	+10%	+6%
Brand G	no shift	+9%	+6%	+12%
Brand L	no shift	+13%	no shift	+9%
Brand Z	no shift	+8%	+11%	+9%
Brand P	no shift	+6%	+10%	no shift
Brand U	no shift	+12%	+14%	+6%
Brand B	+16%	+22%	+16%	+20%
Brand M	-11%	-13%	-12%	-11%
Brand C	no shift	no shift	no shift	no shift
Brand D	no shift	no shift	no shift	-10%
Brand L	no shift	no shift	no shift	no shift
Brand N	no shift	no shift	no shift	no shift
Brand S	no shift	no shift	no shift	no shift
Brand T	no shift	no shift	no shift	-10%
Brand V	no shift	no shift	no shift	no shift
Brand Y	no shift	no shift	no shift	-15%

FIGURE 11
SURVEY ENJOYMENT: CONVENTIONAL VS. METAPHORIX™

% saying 'I really enjoyed taking part in the survey' (4 point scale)

Survey containing Metaphorix™ questions

Conventional Survey: 40
UK: 61
US: 55
ITALY: 67
CHINA: 71

4. Predicting and diagnosing brand success

Can metaphoric scales predict the success of a brand? For two years prior to launching Metaphorix™(in May 2008), Conquest Research incorporated experimental visual metaphoric measures (alongside more conventional questions) into its online brand health and advertising studies in the United Kingdom and elsewhere. Over 120 brands have now been assessed across more than 20 categories.

These tracking data allow us to test the hypothesis that metaphoric scales are predictive of brand success by observing the relationship between a dependent and independent variable. The dependent variable is brand share/first choice brand, and the independent variable is the proportion that placed the same brand at the top end (top three deciles) of a visual brand warmth scale.

This relationship (illustrated in figure 12) shows that brand warmth is a statistically significant predictor of brand share/first choice. The high correlation (The Pearson Correlation Coefficient is 0.76 and $p > 0.01$) provides strong evidence for the effectiveness of metaphoric scales as both a measure of emotional engagement and as a predictor of success in the market.

Figure 12 also indicates that successful brands tend to enjoy high levels of emotional engagement. Generally, the higher the level of engagement, the higher the market share, which is perhaps unsurprising, but figure 12 also indicates that high engagement does not always create successful brands. Thus there are outlying brands that have a high level of warmth, but low brand choice; and those with low warmth and high choice.

FIGURE 12
METAPHORS CAN PREDICT BRAND SUCCES

Pearson Correlation Coefficient 0.76 p>0.01
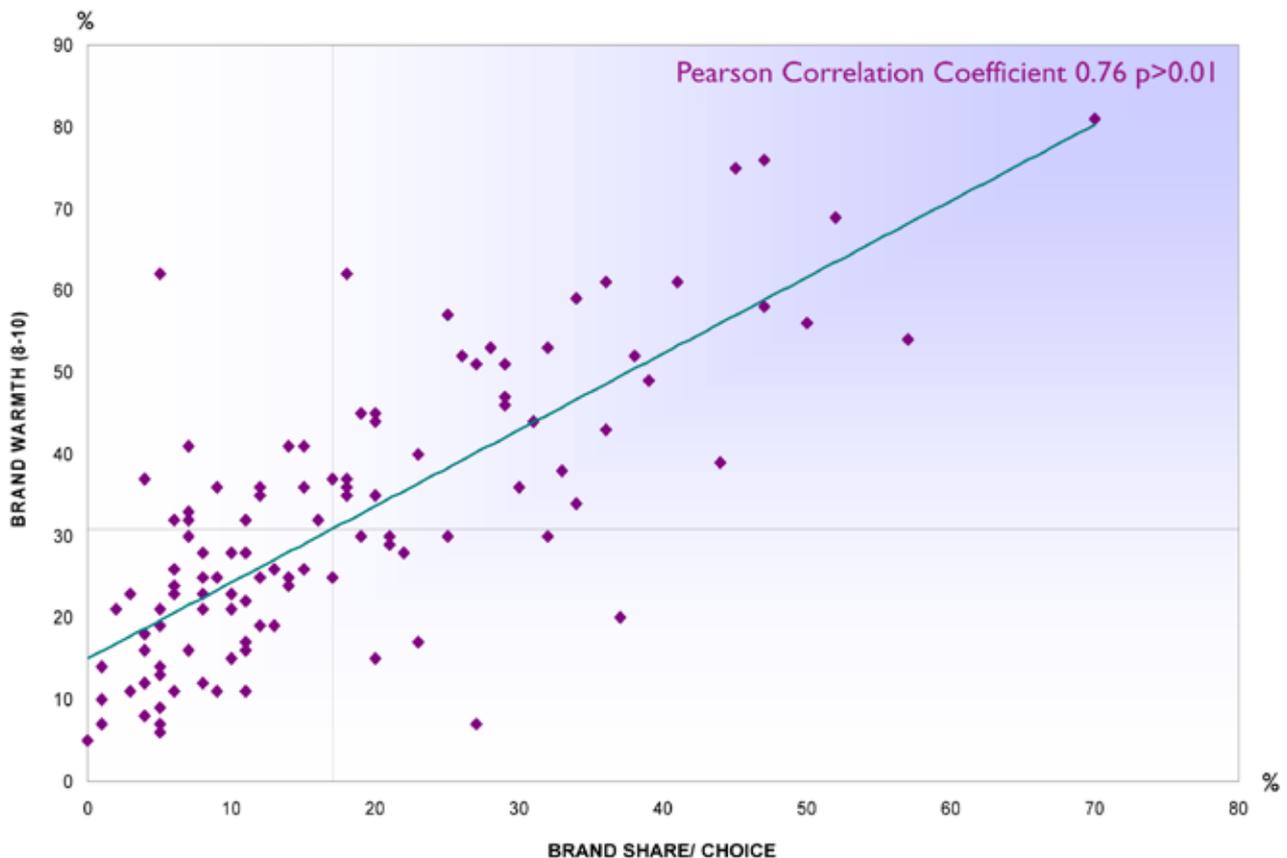
What does this tell us? Where engagement is high relative to brand share, it may be because recent experience or knowledge of the brand is too patchy or too weak to forge a strong link between the brand and what it offers. Alternatively, it may be that the brand is not marketing itself strongly enough; some brands have a huge emotional *potential,* which is not fully exploited by its marketers. Engagement is not enough to drive sales –it has to be *supported* by a good price, product offer and widespread availability.

Where there is low brand engagement, but high brand share, it may be because the brand is offering an attractive set of product features, price, deals, etc., but is not creating enough engagement with its customers. Engagement cannot usually be bought through price, deals or promotion – it usually requires sustained, brand-led, communications activity.

It is also possible to *combine* metaphorical measures of engagement with more conventional ones (such as brand consideration) to segment consumers in terms of their rational and emotional commitment to different brands. Table 4 shows an analysis of two brands from the UK cell phone network market. Brand A has converted a high percentage of those who are warm toward the brand, but has a high percentage of Cool

Considerers, who are not particularly positive. There is probably a need to forge a stronger emotional connection with the brand before these consumers would choose it. For Brand B, on the other hand, the opportunity may be to build a relationship with the Warm Prospects, who *already* view the brand positively, but may not yet have been given a reason to buy. A campaign focussing on rational benefits might well resonate with this group.

5. A cross cultural measure of engagement with brands and advertising?

Encouragingly, it appears that most the benefits of metaphoric measurement, described above, are available to researchers worldwide. We have seen that levels of respondent engagement – across markets as diverse as Italy and China – are consistently high when visual metaphoric scales are used. The hypothesis that visual metaphorical measures *work across* cultures is further supported by very positive open-ended comments, which suggest that respondents in different cultures enjoy, understand and engage with the interview process. Moreover, the high correlations observed internationally (see figure 13) between Metaphorix™ measures (of Proximity, Warmth and Empathy) and conventional brand choice/consideration scales suggest that visual metaphorical measures are predictive of brand success in a range of international markets.

TABLE 4
BRAND WARMTH VS. RATIONAL CONSIDERATION: DRIVE MATRIX

	Brand Engagement						
	BRAND A				**BRAND B**		
DRIVE MATRIX	COLD	LUKEWARM	WARM		COLD	LUKEWARM	WARM
1st Choice	0%	4%	Committed 10%		0%	0%	Committed 4%
Would Consider	1%	Cool considerers 17%	Warm Prospects 8%		1%	Cool considerers 8%	Warm Prospects 12 %
Not in Consideration Set	22%	33%	6%		32%	42%	2%

Consideration

FIGURE 13
INTERNATIONAL METAPHORIX™ CORRELATIONS WITH BRAND CHOICE/CONSIDERATION
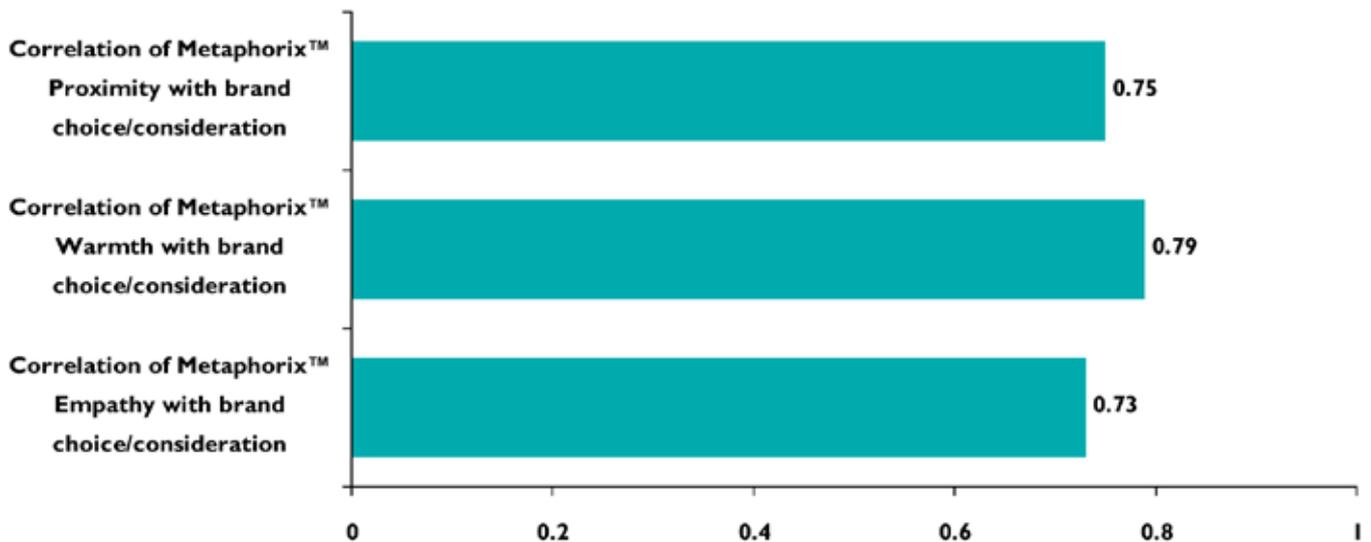
Clearly a lot more work remains to be done, but the results of the Metaphorix™ project thus far provide strong initial evidence both for the effectiveness of visual metaphor as a means of measuring emotion, and for employing online metaphoric scales universally, across cultures.

CONCLUSION

Let's get animated about emotion

It is high time we stopped *talking* about measuring emotion and started doing something about it. The Metaphorix™ approach – based on the applying the cognitive linguistic theory of metaphor to the world of Web 2.0 – suggests that animated visual metaphors can work where most conventional approaches fail. Given the burgeoning understanding of the emotional unconscious, it is astonishing that, even now, in 2008, most conventional market research is text-based and literal, not visual or metaphorical. Most conventional research actually *divorces* respondents from their emotions – the emotion may still be present, but it becomes more prone to rationalisation as they consider their response.

Whilst neurological/biological measures seem to provide an exciting alternative, even their strongest proponents accept that they are at best a complement to conventional approaches, not a replacement for them.

There is strong evidence both for the effectiveness of visual metaphor as a means of measuring emotion, and for employing online metaphoric scales universally, across cultures. These measures seem to *go beyond* purely rational response, freeing respondents to express feelings and emotions which conventional (verbal) approaches miss or suppress. They can thus better capture emotional response and, when employed *alongside* rational measures, provide a commercial insight into brand health denied to conventional approaches alone.

Marketing is all about imagination and metaphor, yet we so easily default to prosaic and literal means of measuring it. By sticking with the conventional paradigm, online research has thus far failed to exploit the most exciting opportunity that Web 2.0 offers – to turn *respondents* into *participants* by fully engaging them with the interview process. It is time to seize the opportunities that the medium can offer and get truly animated about emotion!

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